

Grass Roots

Craft and self-sufficiency

For down to earth people

AUST \$3.75

Australian and
New Zealand Edition

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FEBRUARY 1989

Urban
Self-sufficiency

Flower Essences

Bushfire Safety

Solar Panels

Start a Goat Stud

Terrace Farming



Great Reading

from Night Owl

Community Markets — A Practical Guide

John van Tinteren

A fascinating description of how to live off the earnings from a market stall. John has wide experience in starting and managing a market, and offers practical advice to those wanting to make a living like this.

p/b 128 pp

\$13.50 post paid

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Anthony Allen

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p/b 160 pp

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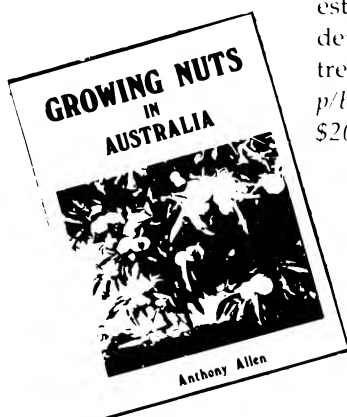
Starting a Nursery or Herb Farm

John Mason

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Ron Edwards

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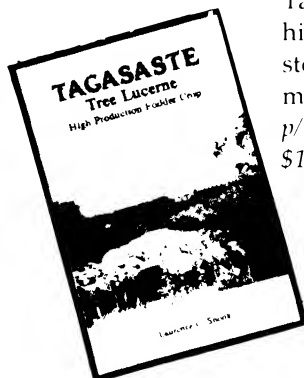
The Bullock Driver's Handbook

Arthur Cannon

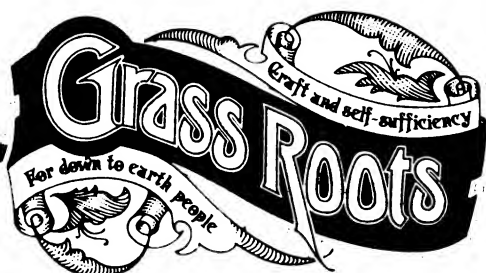
This book contains a how-to-do-it guide, with details of making the tackle, training bullocks and making your own cart. This unique piece of Australian history makes for fascinating reading.

p/b 136 pp

\$15.50 post paid



NIGHT OWL PUBLISHERS: PO Box 764 SHEPPARTON 3630



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Front Cover: Although the dream for many is to own a patch of land in the country, there are lots of people whose commitments make this an impossibility and they are faced with making the most of their urban block. Two stories this issue explore the possibilities of achieving self-sufficiency in limited space. See pages 12 and 61. Pictured is Ken Fisher shovelling compost in his Adelaide garden.

Back Cover: Inside the geodesic meditation dome at Tapitallee Retreat, NSW. It took two days of cutting and drilling to ready all the component parts, one day to bolt the frame together and two weeks for cladding the frame. See page 30 for more details.

Distributed to newsagents by Gordon & Gotch.

Feedback Link-Up Feedback

Dear Grass Roots,

I have a 22 acre farm in Wanganui, New Zealand, with a few cattle and sheep, a couple of pigs, goats and chooks. I am farming organically and basically learning as I go along. I originally moved out here with my partner, but he has gone back to live in town, so I'm learning even more now that I'm on my own.

I'm working towards SELF-SUFFICIENCY and really love the lifestyle, but as I hope to settle down and have children the year after next, I have decided to rent the farm for a year and TRAVEL with a friend through Australia, Sth America, USA, Canada and Europe to learn more about organic farming, permaculture and self-sufficiency. If anyone would like some hard working help on their place in return for putting us up for a week or whatever, please write to me. Of course if anyone wants a return visit to NZ when I get back in 1990 that would be great.



Stephanie Weaver
RD 1
WANGANUI NZ.

Dear Megg and Kath,

My husband and I have recently bought 40 acres on the central coast of Queensland. We are staying in Sydney until we pay it off, hopefully within the next couple of years, and will then be moving up with caravan to start building our own home. We have been told that the wood on the land is adequate for building and so we are going to give a LOG HOUSE a go. We have lots of designs in mind and will eventually settle on one suitable to our needs. We have been reading your magazine in an attempt to learn about building our home, and I thought you or your readers could perhaps suggest a book or magazine that can help us — starting from scratch, i.e. chopping down those great trees that we need, treating them etc. All help will be much appreciated.

Caitlin Kirkpatrick
1/253 Palmer St
DARLINGHURST 2010.

A couple of books by B Allan Mackie may be helpful: Building With Logs, RRP\$22.95; Log House Plans, RRP\$21.95. They're Canadian, but should have information relevant to Australia. Both are published by Log House Publishing Co Ltd and distributed here by Second Back Row Press. So far we haven't had any articles on log house building in Grass Roots, but we'd be interested to hear from anyone who's undertaken such a project.



Edited by Megg Miller and Kath Harper.

Published by Night Owl Publishers Pty. Ltd, Box 764, SHEPPARTON 3630.

Grass Roots is produced for those who wish to regain control over their lifestyle by exploring the alternatives to modern mass consumption. Whether you've just started out or you're an old hand, why not share your experience and knowledge with other readers of Grass Roots. All contributions of articles and photos are welcome.

Cover design and artwork by Ian Boyd.

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Dear Grass Roots,

I have been a reader of *Grass Roots* and also *Earth Garden* for about twelve months now. Have also searched the newsagents and bookshops for any books on the subject of self-sufficiency. Unfortunately most books are written for the more southern climates but have found *Going Tropical* by Ron Edwards extremely good reading.

Have spent the last twelve months dreaming of what I would do on a rural block of land and now the dream is about to come true. My husband is about to retire from the Air Force after 20 years service and we have decided to settle here in the tropics as the weather suits us both (I have had less trouble with my asthma in the 5 years we have been here). Anyway we are now purchasing our rural block of 5 acres which is situated just outside DARWIN at a place called Humpty Doo. So twelve months down the line we should be living on our RURAL BLOCK. John is not the handyman type (yet) so we will be getting a builder to build our house. This will mean my continuing to work full-time for about 10 years to pay off the housing loan but for a first time building project John would prefer to start on something small such as a chook house and run.

In preparation for our move John and I are enrolling in evening classes for Tropical Gardening run by the Open College and I have been to the local Department of Primary Production to find out what fruit and vegetables can be grown locally and get a copy of the Department's Planting Calendar. During the evenings I have been planning which way to site the house on the block and where to put everything else. Our goal is to have some chickens, ducks, vegetable gardens, orchard and as many different varieties of palms as we can grow. This area is to have a path through it for a relaxing walk among the trees and palms. John is also considering having a bee hive.

We realise we would never be truly self-sufficient as we will both be working full-time for a number of years and we only have our daughter Michelle (14 years) and our son Andrew (11 years) to help us (both our families are down south), but to eat our own fruit, vegetables and eggs will be our reward. Will write again when we are settled on our block and let you know how the dream is progressing. We would love to hear from any other readers in the Darwin rural area in order to exchange ideas.

John and Rosemary Worrell
PO Box 277
PALMERSTON 0831.

Dear Grass Roots Readers,

We have just made the move back into the country after living in Melbourne for the past four and a half years, having moved there from a seventy five square km (29 m²) property forty km out of Northampton, WA. This time it is only twenty hectares (50 acres) but the house although rough has great potential and the country is God's own. We are located in the King Valley near Whitfield, Victoria, not far from the high plains. We will be establishing a near self-sustaining vegie garden, goats and chooks so would appreciate contact with any *Grass Roots* readers who may have some helpful ADVICE. Also we would like to contact any SPIRITUAL DEVELOPMENT circles and MEDITATION groups in the area. We believe this is our opportunity to 'get it right' and live the way we should — disregarding the city negativity and pressures.

Peter Bassett-Scarfe
C/- PO
WHITFIELD 3733.

Dear Fellow Readers,

We are a family of three — 32, 30 and 20 months — who are into a healthy lifestyle. We've been content with our lives up to now but we are not moving forward.

We feel very hypocritical living the lifestyle we do compared to the beliefs we now have. We are caught up in a routine that leaves us without enough energy or time to pursue the things we are really interested in. We need to slow down.

We would like to move away from here and find a peaceful area with enough land to give us room to grow. We are interested in building a home — perhaps mudbrick — and would love to become as self-sufficient as possible. Obviously there's no copyright on this story as you've heard it so many times before. It must say something about our modern way of life. Over the last few years we've shared a growing interest in alternative lifestyles. We would love to hear from anyone who can give us information about land or communes in the FOSTER or TAREE area, NSW.

Robyn, Terry & Jessie Channell
6 Squires Cres
COLEDALE 2515.

Feedback Link-Up Feedback

Dear GR Readers,

Hope you are all well and content. Does anyone know a recipe for harvesting aloe vera as we have quite a lot? Also can someone send me a simple plan to construct a CONCRETE WATER TANK? We are going to build it in the Philippines where second hand iron tanks aren't readily available. I liked the letter by Rafal (GR 60): 'Be to her faults a little blind. Be to her thoughts a little kind.' My wife is Asian and I feel the sentiments to be beautiful. I hope someone can help with the tank construction particularly as I have written to concrete tank manufacturers and as yet they haven't made answers. If there are ever any *Grass Roots* readers in the Roxas City Capiz area of Philippines please write or call in there at Dorado Subdivision.

Peter K Blackmore
C/- PMB 4, Montejinni Stn
VIA KATHERINE 0850.

GR 67 and 68 contained articles on concrete tank construction, based on material supplied by the Cement and Concrete Association of Australia, 60 Albert Rd, Sth Melbourne 3205.

Dear Megg, David and Friends,

Thank you for a very interesting and readable magazine and for all the helpful information that is shared.

I would be very glad if anyone can give me information about STONE GROUND FLOUR MILLS. I have been making my own bread for years and would now like to mill my own flour. As we want to keep costs as low as possible, it seems a hand model that my husband could motorise would be the thing, but we are open to any suggestions and would welcome your experience. Best wishes.

Joan Bond
Kingsmill St
RAVENSTHORPE 6346.

Dear GR Readers,

This is the letter we have been keenly waiting to write — by the end of February our son will be married, our house settlement effected (result of a private sale) and our Coaster camper/bus ready for the road for a 9 month TRIP AROUND AUSTRALIA clockwise via WA. The trip is to catch up with old travelling friends, GR contacts made over the last 4 years and hopefully some response from this letter.

I am a retired bank officer aged 47 and have done various useful courses — mudbrick building, stone masonry, welding — and have 20 years general household maintenance experience plus the fitting out of our camper with solar power. Pam is a trained nurse who has worked as a day care centre co-ordinator for the last 6 years and studied the geriatric certificate course over the last 2 years. She has been involved with Girl Guides for 15 years.

Anyone who is building and needs a hand, who is planning or would like company while the billy boils please contact us and we will try to stop by as we travel round — we will be fully self-sufficient and no liability to anyone. As we are looking for a new place to settle eventually we will appreciate the chance to meet fellow GR folk and learn about their areas. God bless you all!

John & Pam Hobba
11 Edwards Ave
PARKHOLME 5043.
08-276-5792.

Hello Megg & David,

Be calm; out damned stress; be not unsettled, as all is well. My copy of *Grass Roots* has materialised. Whereas I was expecting a pamphlet or two on organically controlled convolutions carried out by exuberant devotees of time immemorial rituals I was inundated and, indeed, overwhelmed by the vastness of the magazine and apart from hanging my head in contrition I thank you from the depths of my baggy pants for this new source of enlightenment thrust upon me, and I therefore endeavour to earn my spurs by offering small gems of comfort to those who despise the dreadful chemical warfare being foisted on us by avaricious commercial vultures intent on destroying this fair Universe!

For everything on earth, there is an antidote and all we have to do is find each one! If you have that awful SOOTY MOULD all over your CITRUS TREES, put a tablespoon of Phenyle and a tablespoon of kerosene to each litre of water and spray all over after blossom has become fruit, and you will have lovely glossy happy citrus trees!

G Harris
Hilarity Hill
305 Bay St
LORNE 3232.

Dear GR Friends,

At last I am living on my own small piece of Aussie, unfortunately due to a second failed marriage. Still every cloud has a silver lining and I have at last been able to return to nature and live in tune with it. I have a small caravan on seven acres with 12 volt power, solar shower and hopefully soon a composting toilet.

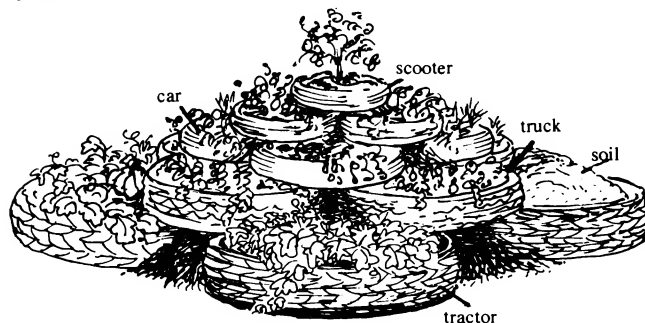
I have heaps of room and would love to hear from any Australian or overseas travellers looking for a place to park the van or tent. Would love to hear from other GR friends I have lost touch with. If Irene Scott is reading this please drop me a line. Power to you all and on with the simple honest life.

Dave Harnett
PO Box 336
MANDURAN 6210.

Dear Grass Rooters,

After 16 years living and working in Asia, mostly Indonesia, am back in Oz and looking forward to settling in the bush. My wife Suty and daughters Shinta (13) and Cisca (11) will soon join son Arjuna (5) and myself in this quaint and beautiful Jamberoo, where I do the maintenance and garden of a motel-cum-conference centre.

During my extensive travels in Asia I have seen numerous innovations and ideas that I would like to share with GRs. Below is one seen in an Indian or Bangladeshi newspaper. It consists of a stack of tractor, truck, car and scooter TYRES to create a pyramid in which to grow a variety of plants. Soil and mulch are added as tyres are stacked. Don't forget to put drainage material in the bottom e.g. gravel, as one would for a pot plant. Topping up soil and mulch should be added from the top as settling takes place.



Height and size will depend on the number and size of tyres and your own requirements — good for herbs, salads and flowers.

Hope to hear from old friends, especially the early folk of Kuranda before it was discovered (pre 1970). It is most satisfying to read *Grass Roots* and other mags of similar ilk. We don't have to feel weirdos as we live out our chosen anti-ratrace lifestyles. Keep up the good work.

John Calvin-Waters
PO Box 44
JAMBEROO 2533.

Dear Grass Roots,

Some time ago I was given some old *Grass Roots* magazines. I'm an old age pensioner and I usually buy my magazines second hand from the Red Cross Shops.

I had kept an item, but now after searching for one week can't find it. It was sent in by a lady who said that her foolproof method to keep FRUIT FLY away from trees was to paint surrounding areas with a Vegemite type of paste. I have enquired at the local seed and pest spray shop but they only keep the poisonous sprays which require gloves and face mask.

Would it be possible for you to enquire to your readers about the fruit fly paste please. Thanking you.

Jo Jirgens
262 Kinghorn St
NOWRA 2541.

Dear Readers,

Can anyone tell me what to do about FRUIT FLY? I have recently moved to northern NSW from Tasmania (where there is no fruit fly) and have no experience in dealing with this problem.

Linda Seaborne
Wyaliba
Old Grafton Rd
GLEN INNES 2370.

Feedback Link-Up Feedback

Dear Grass Roots,

Hello to everyone and especially to folks who live around the SOUTHERN TABLELANDS, Bowning area. I thought I'd write to Feedback because we've started a local COMMUNITY MARKET. Our market started in June with 27 stalls and activities and met with quite a bit of interest attracting many locals, visitors from Canberra and callers off the highway. The Bowning hall building is our venue which has adjoining children's playground and small park area. Stalls have been all indoors but in warmer weather people may be outside as well. We are encouraging friendly talented people who may wish to try marketing — we as yet have no pottery, art or handmade jewellery. Of course organically grown vegies are always popular and I am hoping we will attract some musically talented folk to busk or even small theatre groups because there's a lovely stage in the hall which could be used.

L Stewart
Woodleigh Cottage
Hume Hwy
BOWNING 2582.
Ph: 062-276-131



Dear Grass Rooters,

Used to read *Grass Roots* carefully six years ago and always longed to live on the land, as did my husband. We were married five years ago and restricted finances found us buying a home on ¼ acre near Beenleigh. At the time it was like living in the country, however, within 18 months we were surrounded by little boxes and found we had become a suburbia statistic. Living here has been driving us crazy. We now have the opportunity to escape and are purchasing 3 acres at LOGAN VILLAGE, putting our home here up for sale and hoping to commence building by Christmas. We would be extremely grateful for any INFORMATION and ADVICE on building a dam or bore, septic systems, pumps, water conservation, best trees and shrubs to plant, tanks, fencing, solar hot water systems etc. We don't know anyone down that way and therefore it would be fabulous to meet *Grass Roots* readers who live around that area. My husband and I are in our early thirties, have done heaps of travelling and enjoy meeting people who are basically intellectually and/or artistically minded. We now have three children, but still need adult company so look forward to meeting you all.

Elaine & Robert Earl
29 Halliday St
EAGLEBY 4207.

Dear Grass Roots Readers,

I would love to know any information about the 'AUSSIE DAMPER'. Was it just made in NSW, Australia, by whom, what in and what ingredients did they use? Did they grow their own wheat? I would love to hear from anyone who can help me with this information. This is my first letter to *Grass Roots*, and I do enjoy your magazine.

Janice Campbell
13 Basalt St
MAREEBA 4880.

Dear Readers,

I have been a passionate reader of this magazine for years but this is my first letter. My husband and I are in our fifties and live in Hobart on a beautiful gently sloping 5 acre block with Mt Wellington as a backdrop and lovely rural views. We try to be self-sufficient — as far as one can. April 89 we will be looking for a similar property with house on the south coast of NSW between ULLADULLA AND BEGA as we prefer the warmer climate.

We would be very happy to hear from anyone in this area, to make contact and exchange experiences. We are of German origin, but have lived in this beautiful country for 30 years. I look forward to hearing from you.

A Meyer
20 Leslie Rd
KINGSTON 7054.

Dear Megg,

I was wondering if any readers know where I may be able to obtain lids for the Agee preserving bottles, even if they aren't the originals but something that will fit, as I have many bottles and no lids. Thanking you.

Kay Beverley
Old Glen Innes Rd
VIA GRAFTON 2460.

There have been previous requests for a source of these lids (GR 70, p. 4), so if any readers know where to obtain them please let us know and we'll print details in the magazine for the benefit of all those interested.

Dear Megg, David and GR Folk,

I feel like yelling from the roof top 'We made it!' Out of the Steel City (Newcastle) and onto a lovely ½ acre here at Clarencetown. Our 3 daughters love it and so do we, although our bodies ache from all the work we've done in the last 5 weeks. Vegie garden is on its way and the fruit trees are planted. Can anyone tell me how to look after RASPBERRY, BOYSENBERRY and BLACKCURRANT canes? We have chooks and a gutsy rooster and 4 Muscovy ducklings. We're all sore from work and there aren't enough hours in the day, but when we sleep, it's peaceful.

Anyone who wishes to write is most welcome — I'll answer all. I need help with my BREAD MAKING. If I made enough loaves we could make a bread brick extension — yes, it is that bad! There were dozens of old beer bottles in the old shed when we came here and if the ginger beer gets a move on, I'll be filling the bottles soon.

Well, we must go. Another trip to town for tomato stakes, tools and poultry food. Keep up the great work — this is a fantastic mag!

Joanne & Ian Barrett
25 Marshall St
CLARENCETOWN 2321.

Dear Soul Mates,

I really must thank again all those who replied to my letter in *Grass Roots* and sent info on Cashmere goats. It has all gone on file for the future. Also I had no 'crank' replies, each one was very genuine and three actually phoned. Since writing last we have been to northern NSW and chosen a property. It has become quite a saga, perhaps I should devote an article to it when all is settled. Unfortunately my husband has had no success with a transfer so we are stuck here where our work is for a while yet.

Anyhow I would always be interested to hear from anyone in the Kyogle area who may like to write with any information on vegie gardens, mature trees suitable for the area or just for a chat. I feel I have lots of friends in the area but I just haven't met them yet!

I've been going to college full time this semester. As part of my studies I have been doing Fibre Arts which includes spinning, fabric design, printing and dyeing and paper making. It appears to me that these skills are great for recycling and 'making do', which is something we all need to be more and more aware of as the earth's resources are used up. Peace and happiness to all.

Carol Fickling
PO Box 279
GARBUTT 4814.

Dear Grass Roots,

I started to read your magazine several months ago and am thoroughly impressed with the articles.

I have just moved to Queensland from Sydney and have 2 milking goats. Being a novice it took me a while to get the hang of it (milking I mean). I am so delighted with my new found venture I have decided to breed my 20 British Alpines with a top class British Alpine buck. Do you know of any British Alpine studs around Queensland, especially in the Bundaberg, Rockhampton area? If you can help me on this, it would be greatly appreciated.

Ingrid Williams
Lot 8 Blackmans Gap Rd
MIRIAM VALE 4677.

Dear Grass Roots People,

A group of nine people (myself included) have just begun meeting with a view to buying a large block of land — perhaps 100 acres. We all live in Sydney at present and most of us have plans to travel prior to settling down. Although some of us have stayed on rural communities for varying lengths of time, we feel that we all have an awful lot to learn.

We are aware that we need to acquire practical skills — building, gardening, animal care, fencing etc. We know that there are potential pitfalls involved in buying land with a group of people. We would appreciate hearing of the experiences of people who are also planning to BUY LAND AS A GROUP or have already done so. What factors should we be taking into account when choosing land? What are the problems we are likely to confront as a group? What are the legal issues that we should know about? We all envisage working part-time in a nearby town — four of us are social workers. We will reply to all letters.

By the way I really enjoy reading *Grass Roots* and the sense of community between people that it fosters. Thank you for a great magazine.

Barbara Hatten
24 Beach Rd
BONDI 2026.

Feedback Link-Up Feedback

Dear Folks,

It's been a long time since I wrote to Feedback but I've continued to be a reader through my wanderings. Hopefully in the near future we will be at last moving onto our own piece of land. In the meantime there are a few comments I'd like to make regarding Feedback in the October issue.

K Tighe — I found this recipe for LEMON MINCEMEAT in my copy of *Good Things in England*. The recipe's over a hundred years old and I intend to try it myself for mince pies at Christmas.

2 large lemons
1 lb (450 g) sugar
½ lb (225 g) currants
½ lb (225 g) raisins
¾ lb (375 g) shredded suet
cloves, mace and nutmeg to taste
candied fruits and chopped nuts to taste
one or two glasses of brandy.

Wash the lemons and squeeze out the juice. Boil the skins in water until soft enough to pound to a paste. (It says you must change the water several times to prevent a bitter taste. That would be due to the pith — paring the skin away from the pith would probably do the same thing.) Pound up the skins, add the sugar and mash together. Then mix in the rest of the ingredients, adding as much spices, fruits and nuts as you want. Add the brandy last of all. It doesn't say how big the glasses should be, I guess that depends on how much mixture you end up with, or how much you like brandy! It can be made ahead and stored in the fridge or used right away. I imagine it would taste better made ahead.

If only Lois Rearden (Grassifieds, p. 73) had advertised eighteen months ago, when we were virtually homeless and being turned away by real estate agents and landlords because we have seven children, in spite of references from neighbours and previous landlords. Never mind, it all worked out for the best. Nice to know there are places where families are still welcome. They're obviously not welcome everywhere, judging from the kind of narrow minded prejudice we met with time and again while we were searching for a home. I'm sure if these folk learned to accept people just as they are, there would be less alienation in the world. I love my husband and family, and don't apologise for our close relationship and the strength we find in it. When all else was cold and implacable we had each other and found great comfort in our 'insular' family unity. I love those kids, they keep me sane.

Bronwyn Humphreys — I identify with your desire to 'make the break', and I'm sure heaps of other readers do, but the push comes from within. Do you talk to your kids about these feelings inside you?

Also there was a letter in the October issue from S Moore which I must get around to answering personally. He/she was looking for fellow writers to start a correspondence club. If any OTHER WRITERS are feeling isolated, why not write to me? I am the convenor for the Fellowship of Australian Writers Isolated Writers Group. I was due to hand over the role to someone else as we are moving to Queensland in the near future, but the poor chap died before he could take over. Consequently I'm still the convenor and it looks like I will be for some time — if anyone is interested in joining they can write for details. (You don't have to join, I'd be happy just to correspond.) All the best.

Gail Neville
PO Box 854
PENRITH 2750.

For the lemon mincemeat recipe you could try substituting breadcrumbs for the suet. The recipe does require a binding agent, so either suet or breadcrumbs must be used. You may prefer to halve the amount of sugar used too.

Hi,

I am wanting to get a small supply of TOBACCO SEEDS, and am asking if anyone has a few seeds they could spare. I was browsing through the *Encyclopaedia of Organic Gardening*, looking for tomato growing procedures to try to get a better crop than the last, when I came across a detailed section on growing tobacco. Well, y'know, I thought if a person's going to smoke tobacco (like me), and roll their own (like me), why don't I grow the stuff? Organically grown tobacco, with no pesticides, herbicides or fake fertilisers and whatever else the finished tobacco has added before I get to light up. Not to mention sales tax and packaging costs. Anyway, anyone know where I can get some? I'm into gardening, so maybe I can send on some other seed in return. Looking forward to hearing from someone.

Melissa
37 Coglin St
BROMPTON 5007.

Dear Megg, David & GR friends,

Further to my previous letter (GR 68, p 7) requesting MEAD RECIPES, I thank you all who wrote to me and have answered each letter, as you know.

Very often in 'Feedback' a writer will request advice on a particular subject and I think, 'Oh yes, I would love to know the answer to that question'. However GR friends, being so kind, write personally to the enquirer and we read no more! Therefore, in case others are interested in mead or honey wine, I am enclosing one of the many recipes which we received. Must add that we have not as yet had the opportunity to experiment.

Mead Wine

1 gal (4.5 lt) water
2 pts (1.2 lt) honey
4 cloves
½ oz (12 g) root ginger
1 lb (450 g) white sugar
2 sprigs rosemary
1 6z (25 g) yeast
2 lemons

Boil together the water, sugar and honey and skim off the scum. Stand in a basin and add the juice of both the lemons and the skin of one. Add the cloves, well bruised ginger and rosemary. When at blood temperature or less add the yeast. This will start the fermentation which should be allowed to go on for 6 days but the lemon peel should be taken out after 3. Then bottle and cork lightly.

Incidentally, any doubt we may have entertained regarding the sex of 'Georgie Porgie' (our cocky) has been unequivocally removed! We arrived at this firm conclusion after we were presented with (over a period of 2 or 3 weeks) 4 eggs! We were amazed. Love to all.

Alma Embacher
LAUNCHING PLACE 3139.

Dear Folks,

Does anyone know, or have an address of any COMMUNITY that is not selling shares but JUST RENTING? Somewhere in WA, NT or Nth QLD, preferably. I'd love to hear of one like this.

Also, can someone give me the name and contact address for a good BOOK ON DREAMS? Most dreams I have are about animals and they come true within a couple of days.

Ray Sioux
C/- PO
MT GARNET 4872.

Dear Grass Roots People,

Firstly thank you all for being so human (a rare quality still!). I have been a bit of a wanderer for the past few years, I've come across various regimes or environments and have somehow been the round peg trying to accommodate myself in square predicaments. I'm from NZ and, after having spent 8 months in Melbourne, fled to Tassie for the sake of my sanity.

I'm not really sure what it is that I'm trying to look for or achieve, many a person has prescribed the 'Inner Journey', and I fear they may be right. But for me, I need to feel security and warmth in order to 'venture out' as it were. Being a wanderer one never really experiences either, after all that is why one keeps moving — isn't it? My dreams, wishes and aspirations are to experience peace, serenity, contentment, to be loved and to be able to feel and express that love. I guess I really NEED SUPPORT — there's no shame for me in admitting the need of another human being.

I am 31, a gardener, animal lover, an individual and lost. If there are people reading this who may be able to shed some light, please do and thanks.



Steve Stockley
C/- Somerset Caravan Park
Somerset
BURNIE 7320.

Dear GR Readers,

We are living in nth NSW and currently looking for land and house — organic of course. We are limited by the HOUSING CO-OP. with our funds and we are wondering if anyone has some ADVICE on dealing with them i.e. perks and pitfalls we don't know about. Our family consists of our son Daniel 6 mths old, a soppy Rottweiler and a friendly goat.

Sandy Parker
PO Box 442
KYOGLA 2474.

Feedback Link-Up Feedback

Dear David, Megg & Staff,

I first read *Grass Roots* in June 1987 and first wrote in Oct 1987, seeking information on beekeeping. I got some very helpful information and have replied personally, but would like to publicly thank all who replied. Since then I have also made some very good penfriends and have met some wonderful people through *Grass Roots* which has helped a lonely man enjoy a wonderful year. In all the letters I have received, there was only one unsolicited letter in the form of a chain letter, presumably from the same source as the ones I have read about in the latest issue of the magazine. I don't subscribe to this sort of mail, so needless to say the one I received promptly found its way into the rubbish bin. However, I realise that you cannot be held responsible for this sort of thing and I feel there is only one way to treat them.

During April of 1988 I made a trip to Victoria, unfortunately due to ill health after 4 days I had to return to Brisbane. I thoroughly enjoyed my few days down there and would have loved to have seen more and perhaps visited Shepparton and met you all — maybe next time. In Sept I travelled to Toowoomba and Ipswich and as far as Maclean in NSW, was away 8 weeks all told and thoroughly enjoyed the whole trip. Since I have been back I have been ploughing through all the back copies of *Grass Roots* and have found much interesting and helpful information, especially on beekeeping (much to learn yet but am finding it all a big help).

Now for the reason that I am writing. About April/May 1989 I have to shift back down south (for health reasons) to be closer to a specialist in Ipswich, and will therefore need a PLACE TO PARK my van and myself, in Ipswich/Toowoomba area or north to the Sunshine Coast or south to northern NSW. I am a middle aged man living on an invalid pension who has spent most of his life on the land. Have had years in dairying, grain growing, pigraising, and grazing, also a few years as a station cook, but now due to ill health, can only handle light work and have spent the last couple of years gardening, growing veggies, pot plants and herbs and selling at markets, also making hanging baskets and pot plant stands for sale, as well as looking after the poultry and caring for beehives. I need to do something to fill in my time as you can see so a caravan park is not really the answer. Any suggestions? Thank you again for your past help from such a marvellous magazine and thank you in anticipation of some help with this request. Keep up the good work. All letters will be answered.

**Monty Seng
C/- 'Annaveale Stn'
PO Box 199**

CHARTERS TOWERS 4820.

Dear GR Readers,

Although I have answered everyone who responded to my letter in GR 69 I would like to take the chance to thank you for writing to me quickly. I have decided that my permanent address hopefully will be around Bega as soon as I find the right land. I am looking for people who might live in the BEGA DISTRICT with practical experience in solar heating, home building, fruit and vegetable growing. It would help me a lot to meet someone for advice and practical assistance in the above mentioned skills.

I have a 6 year old daughter and I would feel happy to hear from families as well as single parents. If you have knowledge about good schooling in Bega, please let me know. It interests me to make contact with constructive and positive people who have enough energy and who are happy to work for the day and the future generation. I wish you light and happiness.

**Martha Bakhtiari
C/- Chery Ayoub
71 Bass Dr**

BAULKHAM HILLS 2153.

Dear Grass Roots,

Participation in life is the name of the game. Here I am sitting in my flat overlooking nature wondering what I can do to help others.

I have a magnificent 1½ metre RED CEDAR TREE sitting on my balcony, purchased today to be planted in a worthwhile place. Anybody who would like this tree can have it. Criteria — love, peace, gentleness and a commitment to restoration of this planet to its former glory. Please write to me and this plant will be forwarded to you for your pleasure and care. God bless and peace to all.

**Geoffrey Murray
Unit 22/2 Leisure Close
NORTH RYDE 2113.**

Dear Grass Roots,

Hi, I have been a *Grass Roots* addict since GR 67 so I'm quite a newcomer to your great magazine. I have spent hours reading them from cover to cover, enjoying the experiences and advice that covers every page. I hope one day to have my own land and the pleasure of building my own home.

I have an old friend with whom I've lost contact over the last couple of years. So, JULIE & PETER LEWIS (2 sons — Luke and Matthew) I'd love to hear from you. Also a special hello to some other GR friends — Debbie and Vaughan Seaton and Kerry (Hawkins Creek). Please does anyone know of a REPELLANT FOR GREEN ANTS. They have nests in all our trees!

**Carol Coffison
Sawpit Gully
BAMBAROO
Via INGHAM 4850.**

Dear Megg & GR Readers,

In high winds recently, the top was blown off a *Cardwellia sublimis* tree in the rainforest behind our house. The tree had blossomed beautifully last summer and was covered in just ripening fruits. I collected quite a lot and have plenty of seeds to spare. *Cardwellia sublimis* is also known as northern silky oak, or bull oak, and this species provides much of the sawn timber supply from rainforests in far north Queensland. The timber is a beautiful oak pattern cabinet timber, and the tree itself is very attractive, a large shade tree when grown in the open with masses of cream blooms up to 30 cm long in summer time. The fruit are big woody pods, as big as my fist and they stay on the tree until about October when they slowly open to disperse the winged seed one at a time to the wind. The fruit are a marvel of packaging, with about ten seeds to a pod, each separated from its neighbour by a papery membrane and protected by the very tough outer covering.

The seeds germinate well in a good soil kept moist, and it is fascinating to watch the emerging cotyledons hoist the papery wings above the soil. Although this is a tree of the wet rainforest, it is reputed to be able to be grown as far south as Melbourne, as long as it is watered and kept free of frost. It will eventually grow into a very big tree, but could probably be kept pruned to a reasonable size if it looked like getting out of hand, or at worst sent to the timber mill after propagating some successors from its seed. If anybody would like a few seeds to try, they could send me a self addressed stamped envelope and I'll pop some seeds in. Just to look at the seed and drop them from a height to watch them glide is a lesson in species dispersal. Best wishes to all.

**Don Lawie
'Josey Park'
Via BABINDA 4861.**

Dear Megg, David et al at Grass Roots,

Thank you, folks, for a magazine which has been a practical and emotional prop-up during this difficult transition from city to country living. We moved to our 10 wonderful acres just out of Euroa, five months ago. Full of zest and enthusiasm we attempted to create a veggie garden from a wilderness of thigh-high weeds. Cleared and raised beds had liberal amounts of goat manure dug in, were then topped with cardboard and vast quantities of SAWDUST (freely available and very organic). We have since been told that sawdust takes all the nitrogen from the soil and encourages leaf-eating pests and that nothing will ever grow. Will somebody please tell me if we have ruined our soil and, if so, is there a remedy for our mistake? We are trying very hard, but are raw novices and would appreciate any advice. If any like-minded folk in the area would like to correspond it would be great. Hopefully next time we shall be able to contribute rather than ask for help. Kind regards.

**Marion Warren
RMB 1335
EUROA 3666.**

Dear GR People,

I was wondering if you would be able to help me with regards to a few queries. Firstly I was hoping someone would be able to send me some advice for making LYE soap. Also do any readers have any YEAST recipes as I don't like the commercially bought variety. If so please enclose instructions for use. Thanking you.

**Ann Stratton
Pituri St
BOULIA 4829.**

Following a request in GR 68, several old recipes for making lye were sent to us by Pam Ellis of Cranbourne, Vic. These appeared in GR 70, p. 10.

Feedback Link-Up Feedback

Dear Grass Roots Folk,

I've decided to put pen to paper and attempt a letter worthy of print in *Grass Roots*. I look forward to each copy, to read articles and letters by people that seem like friends so I thought I'd share our recent experience of **MAKING THE BREAK** from city to bush.

My husband Mike and I had spent many hours dreaming and planning of the day we'd embark on our new life (usually after reading the *Grassifieds*). Recently the opportunity arose to sell up, pack up and come up from the west of Sydney to Qld. So that's what we did: had our clothes, crockery, linen and beds etc. brought up by a Bris. co on a back load; filled our Kombi with ourselves, me extremely pregnant and due in December, our 3 children Toyah 5½ yrs, Jade 11 yrs and Mia 14 yrs, 3 dogs, 6 cats and 3 kittens, cocky, budgie and turtle (we also pulled a trailer to accommodate the cats and my comfrey plant) — oh, and our 2 pet rats, one of which I was assured was a male but which gave birth to 9 babies somewhere in transit. Naturally when the family moves that includes furry, feathered and flippered members. We've made it undaunted by the 4 flat tyres the trailer acquired between Ballina and Coomera, the company carting our belongings assuring us they'd arrive the same day as us and in fact appearing 6 days later! Even with our poor Kombi motor dying the following week, we have decided 'we shall overcome'.

Funny how you make plans for the future and all of a sudden you don't know where to start when you finally make the break. So far we have 3 cows to milk and Mike's built the chook house but we have to pay for the new motor before we can accommodate any 'ladies'. The ground is so dry and hard that it's impossible to dig our veggie patch, but we've started little seed boxes up — I've redirected the drainage from the sink and washing machine into the area of the eventual garden. Hopefully it will soften the ground if the rain doesn't come. My long dreamed of herb garden consists of one potted comfrey plant and a very forlorn sprig of mint attempting to grow. As you can see Eden's a long way off yet. One day I hope to write a success letter to you all of our progress, it's early days yet.

The animals love it here. The turtle couldn't care less. Toyah shares Mike's and my joy and determination to make things work. Being 5 yrs old helps. Jade and Mia may forgive us one day, especially Mia in her teens isn't overly impressed with peace and tranquillity, thus, we hear INXS and Poison blaring and protesting their way through the wilderness of a night, hopefully making life with her 'gypsy' parents a little more bearable. I'm hoping in time the older ones will adjust. It's hard to make someone enthusiastic about your own dreams. Mike's working in Brisbane 5 days a week, so it's hard to get everything started up. Hopefully in the New Year he could work part-time closer and spend more time on the land. But we need the money now. We're planning our baby's birth at home and at present I'm in a panic hunting up midwives to help. We decided this part of our dream would be complete with our family sharing the arrival of our new little Queenslander.

I'm sorry for the length of this letter. Thank you for a wonderful magazine to keep me sane and also I've been writing to a lovely lady that I contacted through her letter to *Grass Roots*. Hi, Susan!!! Bye for now, God bless you all.



Anji Porter
C/- PO
ORMEAU 4208.

Dear GR Readers,

I wrote in a few months ago asking for advice on **HOME-BIRTHS** and **IMMUNISATIONS**. I received a lot of letters from people whom I have thanked personally. Now I am writing to inform all those people of my decisions on both subjects.

I have decided against having a home-birth, not because I don't want to, but because my husband isn't ready for it, and I feel I would need his total support. After researching the subject through, I would advise anyone to have a home-birth as long as they had a supportive husband.

Regarding immunisations I think I have made a very wise and informed decision. The only immunisations my children will have will be by homeopathic means, combined with a very good diet. Thank you once again to all those concerned people who wrote to me, and helped me to make a very important decision. Keep up the good work *Grass Roots*, it's a great magazine.

Kim Hynes
17 Stoney Crk Rd
WARRANDYTE 3113.

Dear GR Readers,

Our idea concerns the production of a book introducing children and their parents to Australia's National Parks. We want to outline the need to respect the animal and plant life which exist in the National Parks. This book will be aimed at a young audience to the age of ten.

Since the arrival of our second child, we have found it difficult to obtain good photographs with simple appropriate literature concerning **LIFE IN A NATIONAL PARK**. We wish to fill this gap. Ideas concerning our book are based on photographing our children in the National Park and building a simple storyline, introducing animals, plants and how we can learn to respect the natural splendour. As we have lived many years at Rainbow Beach, our first project will concern the Cooloola National Park up to the top of Frazer Island. We would be most grateful to hear other views on ways to develop this idea.

Helen Bartholomew & Dean Bosley
C/- PO
RAINBOW BEACH 4581.

Dear GR Readers,

Does anyone have any ideas or know any **USES FOR FEATHERS**? I have started breeding all different kinds of birds, lovebirds, peacocks etc, and am collecting lovely coloured feathers from the aviary floors. I thought of making cards — any ideas?

D Day
116 Millstream Rd
MS 185
BEAUDESERT 4285.

Dear GR Readers,

We had a short sojourn in country life but unfortunately just as we were getting settled in our rented house after only 2 months it burnt to the ground. We lost everything but our lives and have counted our blessings ever since. We are now back in our original town (city of Wollongong — steelworks city extraordinaire!) but have a wonderful house on the beach, amazing how things turn out. I could not have coped as well as I did had it not been for my 8 year old daughter. As we sat on a lounge in hardly any clothes at the neighbours, our house still burning — it was my baby that told me 'It doesn't matter Mummy, we're alive!' She has never whinged or fretted for lost toys and her only concern was for the dogs and the three legged cat (who left the house before we did!).

My greatest personal loss was a book called *The Complete Works of Ella Wheeler Wilcox* I had next to my bed, and the other was (it came as a shock to me too) my teddy bear. It was the only possession I had that was bought for me by my father who died when I was only 18 months old. I realise now that the real gift he gave me was to find joy in giving, not receiving or possessing.

I am much more emotionally happy and have learnt many lessons from losing everything. The major one was that you cannot start a new life and take the old with you. So as we regenerate, I plan for the new life I still want and now have a new love to start it with. The future looks bright — one good thing about losing everything and hitting rock bottom — there is only one way to go and that is up!

Thanks for putting out a magazine that encourages me to still head for that dream home — this time one with good wiring!

Michelle & Natasha Ryan
3 Jones St
THIRROUL 2515.

Dear GR Readers,

I thought readers in this area might like to know of the formation of the **CALLIDE ORGANIC GROWERS GROUP**. At a meeting held on 19th November, 1988, it was decided to form a group whose aim is to encourage those who already use organic methods, and to promote these ideals to those who are not familiar with these practices. Anyone interested can contact Anne, on 079-921-479.

D J Rice
PO Box 352
BILOELA 4715.

Dear Grass Roots Readers,

We would like to cut our own **FENCEPOSTS**, but we were told they would only last about four years if not treated. Does anyone know of a **CHEMICAL-FREE TREATMENT** for fenceposts that will preserve the timber native to this area?

Martina Battig
The Pineapple
Barry Way
JINDABYNE 2627.

Feedback Link-Up Feedback

Dear Megg,

Well, I have just finished reading *Gumnut Gossip* in the most recent *Grass Roots* mag and as you requested some input from city readers, I thought that now would be a good time to write about our SUBURBAN LIFESTYLE.

When I moved (18 months ago) to the outer suburbs of Melbourne I decided to live as realistically a GR lifestyle as possible. The yard consisted of nothing but rubbish when we first arrived but with a lot of hard work and long hours we have the bare essentials now established. As much as possible has been recycled — all the wood and bricks have been used in edging the gardens, the rocks and tiles are used as drainage on the driveway, excess grass clippings used as mulch and cut tree branches are burnt and put back into the gardens.

We now have raspberries and strawberries growing and a large variety of herbs. Tomatoes, capsicums, zucchini and leeks were plentiful but lettuce and broccoli weren't very successful as we don't use any type of insect repellent. But we are quite close to the St Andrews Market and can buy organically grown vegies and fruits there. This market also allows us to buy eggs, honey, flour, bread, tofu etc, all made without the modern day additives and is a wonderful community market.

With a few punnets of annuals and seedlings and clippings I have a small but rather lovely garden which is put to quite a few uses: long stemmed seed pods (love-in-the-mist) and flowers are cut and dried and put into baskets around the house or made into wreaths for myself or for gifts; flowers are pressed and made into pictures, cards and bookmarks or dried and made into potpourri; fresh flowers are always on hand too even if it is only in the form of Shasta daisies, nasturtiums or forget-me-nots. But most of all our garden is beneficial to the birds, which have been increasing in numbers of late.

I also spin (wool from St. Andrews Market) and knit up the odd article of clothing during winter. I have heaps of fabric scraps and plan to make a patchwork quilt soon. I enjoy cooking wholesome and nutritious meals although I haven't got the heart or motivation for making bread in an electric oven — it's just not the same as the old combustion stove I used to have. Yes, I too lived on a property and 'had it all' — animals, nut trees, established vegie gardens and a view of the countryside which would keep you going forever — but now I reside again in suburbia, attend College part-time, work full-time, and have a young son (aged 5) to care for, whilst still trying to maintain a realistic GR lifestyle. No, we don't always do well, it can be easier to give in when you are tired. But it won't be forever, I still have my dreams but now as I am getting older (24) I am becoming more determined that I will succeed. Somewhere, somehow, someday our dreams and ideals will be realised and we'll just keep working at it till they do.

Before I close I was just wondering if you know of anyone who has any HONESTY SEEDS? Just can't find them anywhere. Keep up the great work with the mag.

**Vicki Ward
2/10 Hyde St
DIAMOND CREEK 3089.**

Dear Grass Rooters,

First, thanks for a great magazine. It's cheering to realise how many lovely people there are tucked away in places I'd never heard of.

The other reason I'm writing is that my little family is moving to Torana, NEAR BATHURST, early in the New Year. We'd like to link up with like-minded people living in that general area. I'll have the mail redirected when we move, so the address below should hold till March 89. We are Allison, Peter and Sam (18 months). I am interested in feminism, homebirth, alternative health, meditation, reading and New Agey things. Peter is interested in guitar, gardening, walking, travel and economics. Sam is interested in food and destruction. We will be living without electricity and want to plant a vegie garden, so advice on those things would be appreciated. What survives and what doesn't? Peace and prosperity for the New Year.

**Allison, Peter & Sam
PO Box 306
SWANSEA 2281.**

Dear Readers,

Recently I read an article on SILKWORMS, written by Pamela Davey. Having experienced the fascination of these insects myself as a child, I would very much appreciate an address where I may be able to obtain silkworm eggs so that my children may be as fascinated as I was.

**K Coglan
7 Wilcox Close
MANOORA CAIRNS 4870.**

Hello,

After five years in British Columbia we are RETURNING TO NSW to settle. We are a family of five (children 12, 10 and 4) who plan to work and travel the first year to re-acquaint ourselves with the people and the more secluded areas, then purchase land where we will continue with organic market gardening, herbal crafts and creating a healthy environment for our children. We like to live independently, yet have neighbours with a 'sense of community'. Anyone writing with practical information or ideas concerning this, thank you. I am also interested in REAFFORESTATION (tree planting) i.e. how is the system set up? How are contracts awarded? When and where is work available?

**Alexander North
Box 11
LYTTON
B.C. CANADA.**

Dear Readers,

I am trying to find some information about GROWING TARO as a fodder crop and whether it grows well in NSW. Can anyone help? If anyone has a do-it-yourself plan for a WIND-DRIVEN PUMP I would be very grateful too.

**L S Groves
C/- PO Box 764
SHEPPARTON 3630.**

G'day All,

This is my first letter to *Grass Roots* even though we have been reading it for years. We have just recently scored ourselves our own piece of Aust. with a lot of work ahead of us, but it is great to have something to work towards, even though some I'm sure have labelled us 'crazy' when we tell them we have bought 380 acres of mountainous country. They just nod their heads and say, 'That's nice!' I'm sure all those who have or are dreaming of (and saving for) doing something similar will understand all too well! Anyway I'll stop preaching to the converted and send out a call, to GARY SHULTZ (I hope that is how you spell it Gary) of I think, the Miriam Vale area, formerly of Warwick. The next time you are in Toowoomba could you drop back the *Grass Roots* magazines I lent you — we are in need of them now as we will be without power on our new place as well. If you are staying overnight in town all the better, drop in for tea, a beer and a chat. It would be good to see you again, we are still at the same place.

Does anyone know an ALTERNATIVE TO HEARTWORM TABLETS for dogs? After having lived in Nth Qld I have seen the dreadful consequences they can cause to a dog but I am not keen on using the drugs if there is some other way of preventing this parasite. Thank you all for a great mag and for listening, fruitful gardens to all.

**Mark & Penny Kidd
91 Stephen St
TOOWOOMBA 4350.**

Dear Readers,

It's 9 a.m. and we are getting the first storm of the season, Hooray! I've got a cat trying to cuddle up on my lap. I knew if I put the sprinkler on the horse paddock, that would induce rain.

While I think of it (hot days, that is) those of us who use butter know of its shortcomings. It's always so hard to spread and soft butter is so expensive. I make my own SOFT BUTTER. A food processor makes this easy. Cut up the butter into the bowl and allow to become not too soft. Blend till creamy then drizzle in vegetable oil. The proportions should be approx. 4 parts butter to 1 part oil. Turn mix into butter dish and refrigerate. It will always be spreadable now. This is an amazing way to keep family peace! It can be used for baking too.

I'd like to hear from people in the Sunshine Coast hinterland area who are building their own homes or building with earth. Can I come to visit your building site please and can I ask advice and compare techniques please? Health and happiness to all.

**Clarissa Townsend
Box 466
CALOUNDRA 4551.**

Dear Folks,

Was wondering if any or many people have knowledge of a MACHINE that makes COMPRESSED CLAY BRICKS. The one we've seen is run by a diesel motor driving a hydraulic ram, trailer mounted. It was quite impressive so we would like to compare and hopefully purchase one. These things happen when they do! Cheers for now.

**Shelly, Daire & Zac
PMB 62
ALICE SPRINGS 0870.**

Feedback Link-Up Feedback

Dear Grass Roots Readers,

I came from Victoria to share a sort of hobby farm with my daughters. I'm not sure I'll make it in such a different climate. I lived for 3 years just over the border in NSW about 14 years ago and didn't mind the heat, but I'd come from South Australia that time and was more used to hot weather then. However, I don't need to go out of doors in the middle of the day now but that brings me to a problem — I'm an active pensioner lady, widow, and would like to find some NEW FRIENDS between 65 and 70 who share my interests, which are gardening, bush walking, writing, intelligent conversation, reading magazines like *Readers Digest*, *National Geographic* — and since a neighbour lent us a copy of *Grass Roots*, this may end up my favourite magazine, as it's so full of down to earth information.

I often wish I had my little Vespa scooter again, but I let my licence run out years ago, and I'm sure I couldn't get another one today, so many more new rules to learn, it would worry me.

**Mrs Dee
C/- PO
CANUNGRA 4275.**

Dear GR Readers,

Could someone please help me with my problem with KIKUYU GRASS? I have it in my vegie patch as well as under my fruit trees. I have tried the no-dig garden method, heavy mulching and digging it out, but the grass still manages to rear its ugly head. As I don't wish to use chemicals, what do I do now?

In answer to K Tighe (GR 69) regarding his excess lemons: my mother always made LEMON CORDIAL the following way. Squeeze the juice from as many lemons as you wish to use. Weigh the juice and pour it into a large container. Now add an equal amount of sugar in weight. Stir. Now leave for several days, stirring at intervals, until you have a super saturated solution and all the sugar has dissolved. Strain, bottle and seal. The cordial will keep for many years.

In answer to Richard Kandel's query about a self-sufficiency group, I don't know of one, but I am secretary of the RANGES ORGANIC GROWER'S ASSOCIATION and we're based in Ferntree Gully. Any interested people please ring me on 03-763-9419.

Best wishes to you all.

**Trudi Murray
8 Windermere Dve
FERNTREE GULLY 3156.**

Hello Fellow-Grassrooters,

It is wonderful to see how many more people return to the earth and share their knowledge and experiences, not only in this corner of the world, but in so many other countries as well.

I did the 'big move' 2 years ago, after spending most of my life in big cities. Although it wasn't easy to get used to a life in fairly isolated conditions and having to make new contacts all over again, I definitely prefer down-to-earth living and hope that I never have to live for a very long time in a town or city ever again. In Australia and New Zealand we are still very fortunate to have the possibility of getting affordable land, in a relatively clean environment and a bit of time left to learn from mistakes already made in Europe and Nth America with pollution, nuclear power etc.

I just would like to SHARE SOME IDEAS with those of you who care about our planet and who would like to do something about the current state of affairs but are not sure how. The *Non-Buyers-Guide* (\$6.00) tells you of products made by companies who are directly harming the ecology, peace and social justice in our world. The more people boycott these companies and banks, and inform other fellow consumers about it, the more likely it is to show some effect on their dealings. There is also a list available on rainforest timber species, which should not be bought anymore, since the logging of these causes hardship to many tribes in the tropical forests of the Third World countries. The list names alternatives for certain timbers and their purposes, and should be circulated to anyone who intends to buy or works with timber. Both these lists are available from the Rainforest Information Centre, PO Box 468, Lismore 2480.

If you haven't done so already, join organisations such as the Australian Conservation Foundation or TWS, Amnesty International, your local Environment Centre or group. For those with little money there are usually special concession rates for 1 year membership. Increased membership numbers will help these groups to have more effect in their lobby and campaign work.

Writing letters to or ringing up newspapers, magazines, radio and

television stations can be more effective than many people realise. For example, a letter to your local council, state or federal politician can represent up to 100 potential votes — depending on the issue and can influence the decision making process considerably. These government authorities are by law obliged to reply to anyone's letter, so don't worry too much about your grammar. As well, you could photocopy articles or leaflets on issues you feel strongly about and spread them around whenever you come past public noticeboards at libraries, schools, shops, churches, etc . . .

If anyone is interested in land around the Kempsey/Macleay region — we would love to see more caring GR people moving into the area. I'll leave you with that and best wishes to everybody. A big thank you to all those who make this important magazine. For more information contact me, but please include return postage.

**Gabrielle Luft
Mungay Creek Valley
WILLAWARRIN 2440.**

Dear GR Readers,

I have been reading this wonderful magazine for a few years now and have gained a lot of knowledge through my well read pages. Myself (Sue) am a keen arts and crafts type of person, and love country living. My 2 children, 5 and 6 years, are healthy, happy and the joy of my life. It's time for the 3 of us to FIND A PLACE that we can call home and settle down.

Can anyone tell me about the laws concerning multiple occupancy? I would love to hear from anyone who can tell me the pros and cons of sharing land or your experiences of going it alone with young children. All letters welcome and will be answered.

**Sue J G
C/- PO
GRAFTON 2460.**

Dear Grass Roots Readers,

In reply to Bill and Betty of Charters Towers (October 1988 issue) regarding ALTERNATIVE or HOME SCHOOLING. This is something I have seen asked many times. Yes! It does exist, but like many things, it is hard to find out about. In Western Australia it is called Distance Education Centre with approximately 2000 students ranging from permanent, isolated, handicapped, travelling and overseas children. The parents are usually the home tutors/supervisors to the child's schooling.

Regarding WHITE ANTS — I do not know if it works, but we run our hens in the orchard and we have no trouble with our fruit trees. You may need to put bags or cloth around young trees. White ants tend to appear in buildings once they are vacant for a time. Why I do not know, no noise or smoke?



**Graham Vowles
PO Box 1088
KALGOORLIE 6430.**

Dear Friends,

From time to time I see letters in your eagerly awaited magazine giving a Christian slant to alternative lifestyles and communal living. About the latter, may I take the liberty of reminding those interested that the history of CHRISTIAN COMMUNAL LIVING goes back nearly 2000 years to the first apostolic church, amongst whom everything was held in common. It became a reality at various times since then, always associated with peaks of spiritual devotion. Lots of people love to quote Francis of Assisi, or have his prayer hung on their walls. Few realise that he and his brothers practised Christian communism. The Hutterian Anabaptists, most of whom now live in North America, have been practising it for 450 years, giving the lie to the idea that communal efforts inevitably fade into individualism.

Why have the Hutterians lasted so long? I suggest because they have all been willing to bury self in Christ for the good of all. Simple as that! Socialists talk of communism as the end to which their politics will work. It won't, and can't be done by force or devious ways to change people's behaviour. I happen to believe that the most lasting communism has been, and will continue to be, practised by individuals dedicated to living out together the 'sermon on the mount'. I would welcome any letters from people committed to this. Perhaps God can take us a little further down that road.

**Kevin Smith
PO Box 213
KATOOMBA 2780.**

‘Achieving full self-sufficiency is unrealistic in most situations and results in too many people becoming discouraged by their failure to accomplish goals that are beyond them and their situation’, says Gerald Shepperson. ‘Towards self-sufficiency’ is the theme of a workshop he occasionally takes and it also summarises very accurately the path he is taking in life. The Shepperson family have 2 acres in an outer suburb of Perth and feel that total self-sufficiency is unlikely from a block that size. Some income and food must be brought in from outside. They do believe however that it is possible to generate the bulk of their family’s food needs, with a small surplus for giving or trading. Although their house was built only four years ago, in the time since they have managed to plant and establish strategically placed belts of shelter trees, a wide range of fruits and nut trees, vines, perennial vegetables, herbs and maintain an extensive vegetable garden. Gerald’s philosophy and practices for achieving this integrated growing environment are outlined below.

Towards an Integrated Growing Environment

by Penny Lee, Bayswater, WA.

Centuries of agrarian expertise in rural self-sufficiency have made Gerald Shepperson what he is today. In his knee high black rubber boots, he seems to have stepped straight from the cow byres of the Isle of Ely in England’s Fens district near Cambridge. His accent as he grinds out one of his farming maxims is unaffected by seventeen years in Australia. It has its roots in the deep black peat of East Anglia and wears a thick woolly character evolved perhaps through hundreds of years working in icy winds howling off the North Sea and sweeping over the land of his ancestors.

‘I’d rather share my fruit with a maggot than a poison bottle,’ he says, dumping another load of manure onto one of his raised vegetable beds and explaining his philosophy of ‘total environment’ growing. This philosophy is a well melded blend of ancient common sense and rediscovered principles of permaculture and organic growing. On his sandy 0.8 ha (2 acre) block in one of Perth’s outer suburban wastelands, you might have been tempted four years ago to smile politely at his aspirations for near self-sufficiency by retirement age. There was no house on the block, and pioneer nursery trees only a few centimetres high were being watered weekly from a bucket.

The block was typical of many in Perth’s outer suburbs, dry, hot and sandy in summer and bleak in winter, assaulted by strong winds, (hot and cold) throughout the year and supporting only native vegetation, mainly paperbarks (melaleucas) and pigface, a succulent groundcover often found on wasteland. The water table is high, however, so there was little difficulty in putting in a bore, which uses a 5 hp 3 phase electric pump (locally made by Stalker) feeding overhead sprinklers covering half the block. This bore was put in once the house was finished and the family had moved in. Until it was ready, a combination of mains and hand watering was used.

The house is part of the system Gerald then set out to establish fully. Set east-west on the north-south aligned property, it has high ceilings, and deep verandahs on all sides which keep walls cool in summer, yet in winter container grown pineapples and pawpaws on the front verandah receive the warmth of a lower northerly sun. A solid fuel cooking system supplements solar energy for heating. The house has been designed to be as energy efficient as possible. It was built to a plan drawn up by the family to suit their living style and philosophy. Exterior walls are double brick. These carry the roof providing greater flexibility to develop or alter the room

setup if required. Timber ceilings following the roof line are insulated and one wall in each room is also timber for greater warmth. High wear walls are low maintenance facing brick. A walk-through laundry at the back of the house has been consciously designed to accommodate the self-sufficiency lifestyle the family aspires to. There is ample storage space for work clothes in this room so that dirt does not get tracked into the house (boots are left on the verandah outside) and food can be washed in the troughs if necessary. The house was built by Kentucky Homes. Household water comes from mains supplies and from a rainwater tank which is also used to water the poultry. The garden is watered from the bore. On the south facing verandah is a fridge for egg storage. Some produce is kept from season to season in the freezer e.g. beans and mulberries, but basically the philosophy is to have a supply of produce all year round varying with the seasons.

Efficient use of energy includes human energy as well. Gerald minimises walking distances involved in all work as much as possible as he is becoming limited by arthritis in what he can do physically.

Once the basics were all established, Gerald ‘retired’ early in 1988 to take up full time work at home. He is already well on the way to meeting his objectives. Considered one of Western Australia’s more successful organic growers from any point of view, he is probably unique in terms of time taken to achieve aims he and his family set themselves. The block next door to the west is a constant reminder of what they have achieved. Next door is a dusty horse paddock with sufficient heat rising off it during summer to scorch shelter belt plantings along the boundary of the Shepperson holding. Then when the sea ‘breeze’ comes in too enthusiastically some afternoons it brings sand with it in enough force to blast the vegetation along the fence even more fiercely. Behind the windbreak on the Sheppersons’ side however, there is a profusion of productivity sufficient to meet most of the food needs of a family of four adults and a child as well as providing welcome additions to the diets of friends. Behind the house a large shed cuts off cold winter southerlies. Shelter belt plantings of albizzia, bana grass, sunflowers and elephant grass, as well as the indigenous plants like melaleucas and blackboys left uncleared, provide protection for two year old fruit trees, vine and bramble crops, vegetables, ornamentals and poultry runs behind the shed (see figure 1).

Fig. 1. Gerald's 2 acre block.

roadway

Zone 1 (0.2 ha/1/2 ac)

N

driveway and firebreak

dwelling

geese

tank

work and storage shed

carport

front yard — trees
— shrubs
— ground covers

all hardy (and colourful!)

overhead watering

back and side — herbs
— mulberries
— windbreak
— stock feed

Zone 2 (0.2 ha/1/2 ac)

windbreak of Chilean willows, banana grass, etc

poultry area

hot summer easterlies

vines and vegies in raised beds

shelter belt — tagasaste
— albizzia
— almond tree etc

vegies and fruit trees

bore

gate

strong sand carrying westerlies

Zone 3 (0.2 ha/1/2 ac)

cold southerlies

goats for milk (eventually)

free range poultry — fed once a day

free range poultry

Muscovy — 1 male, 2 female
bantams — 2 male, 8 female
geese — 1 male, 3 female

Zone 4 (0.2 ha/1/2 ac)

lambs (eventually)

bees

native shrubs and trees
melaleucas and some introduced trees e.g. albizzia

block length 200 m (650 ft)

40 m (130 ft)

KEY PRINCIPLES

There are three key principles which underly the Sheppersons' success in establishing themselves in an inhospitable environment.

Start Right

Gerald considers that too much permaculture oriented teaching encourages naive enthusiasts to ignore first principles. You have to have a total environment concept, he believes, and this means starting with pioneer species which will break prevailing winds, and utilising whatever vegetation is already on the block as nursery trees or ground cover. There is no point in struggling with vegetable or even herb or ornamental plantings, nor any of the more delicate types of fruit trees, in his opinion, until you are well on the way to building an environment in which these things can thrive. Nor should you clear until you're sure you need the space for your own plantings. So the first concern must be to get quick growing trees like *albizzia* and *tagasaste* well established.

When they are doing their job of breaking some of the stronger wind and providing the kind of shelter which permaculturalists call a sun trap — usually a semi-circular belt of trees and shrubs with the outer side of the planting

facing the prevailing wind and the inner curve oriented to the sun — then it's time to plant fruit trees and build up vegetable gardens. In the meantime livestock (in this case, poultry) can also be settled in, and their manure can be utilised to build up the environment further. In Gerald's case, he also initially used large quantities of horse manure, traded for eggs and carted in each weekend, as the main soil improver. This would be dumped either on heaps of pigface as this weed was gradually cleared from the block, or into raised vegetable beds made of used railway sleepers. Sweet potatoes and pumpkins could be planted straight into the heaps or beds; in other cases, the compost was allowed to sit for a few weeks before seedlings were established in it.

Today there are plums, apples, oranges, mandarins, tangelos, figs, mulberries, loquats, lemons, grapefruits, limes, a pomegranate, a Natal plum and guavas as well as strawberries, youngberries, boysenberries, cape gooseberries, passionfruit, bananas and rhubarb to choose from in the way of fruit. Almost all of these plantings have borne their first fruit. Almond, macadamia and pecan trees are coming on nicely as well. To many observers, the 'orchard' might seem unconventional since fruit and nut trees are interplanted with vegetables and utilise the protection of native and shelter (or nursery) trees. There are no straight lines of trees. Care in general is the same for the whole of the Zone 2 area (see figure 2) where most of the fruit is to be found. Gerald has largely avoided stone fruit (which are terribly susceptible to fruit fly in Western Australia) because the alternatives to pesticides are time consuming and often problematic.

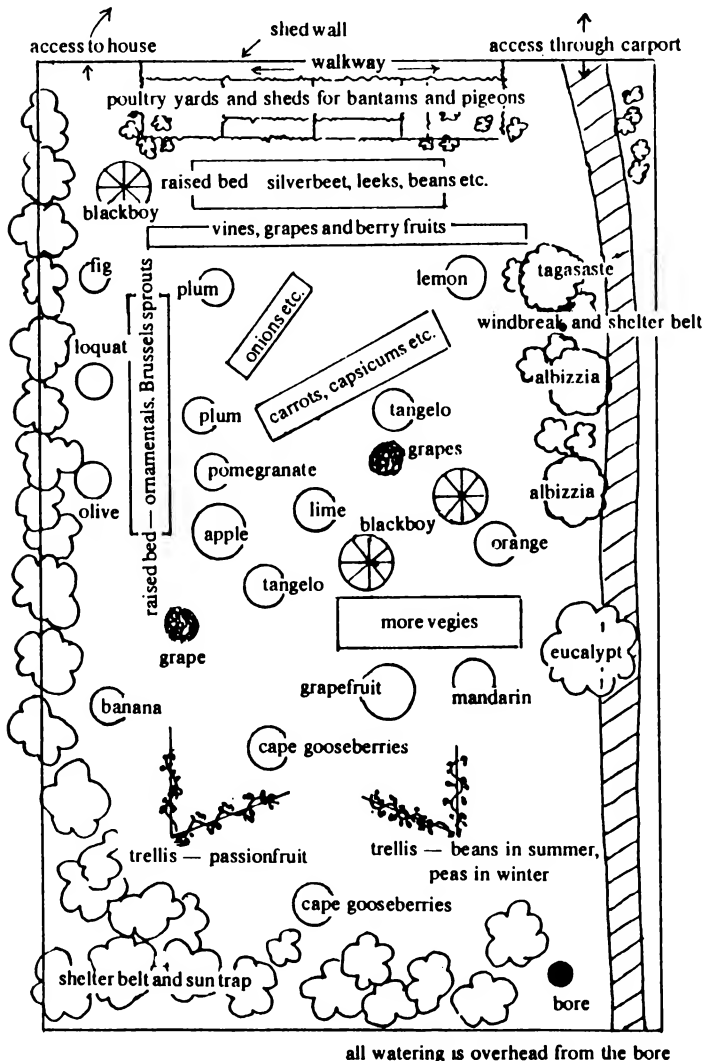
Near the house as well as through the vegetable garden there are herbs of many kinds, both as culinary herbs and as a system to discourage pests. Perennial vegetables include asparagus, perennial leeks, sweet potatoes, garlic, shallots and New Zealand spinach, while there is always a choice also from a range of other varieties including silver beet, capsicum, tomatoes, beans (broad, dwarf and runner), peas, radishes, carrots, parsnips, beetroot, melons (various), marrows, cabbage, cauliflower, broccoli, cucumber, curly kale, English spinach, onions, pumpkin and lettuce.

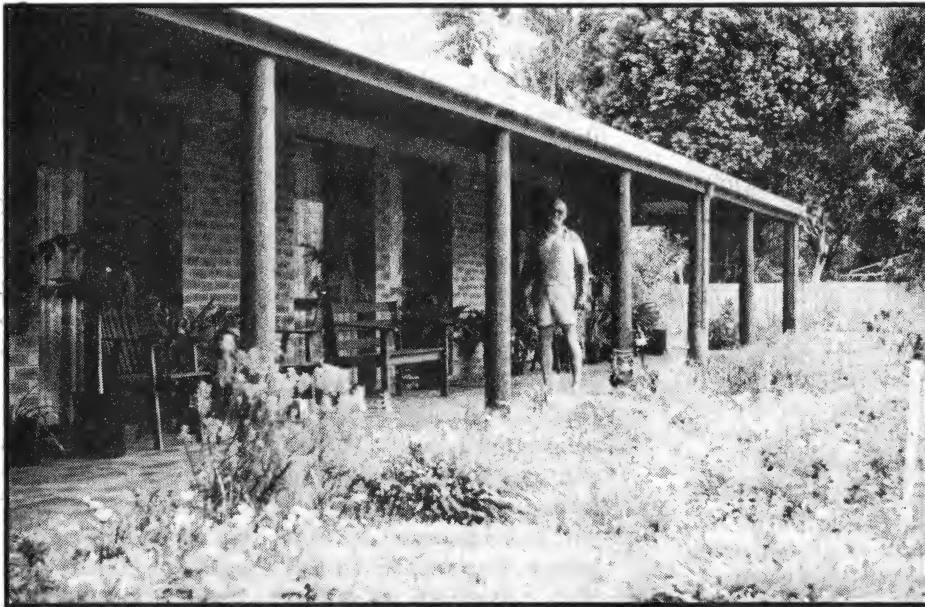
Keep the Ground Covered

This is the second important principle when establishing an integrated total environment, Gerald believes. It cuts down on evaporation, discourages plague grasshopper breeding and fosters worm build up and improved soil structure. Gerald rarely weeds except to remove spent vegetable plants or a few isolated species he finds especially troublesome. He uses a whipper snipper to keep ground cover to the height he wants and returns cut down, cut off or pulled up vegetable matter to the soil as sheet composting. Much of the rest of the ground is thus covered by a living mulch. In the vegetable beds, horse manure and some shredded plant materials provide both planting medium and mulch. Sprouting weeds can be killed by disturbing the mulch. Poisons should be avoided. Gerald likes to remind people that as recently as the nineteen thirties he and millions of others like him throughout the world lived without the poisons we use today.

The livestock are also very much part of the system. Ducks not only provide manure as well as eggs and meat but also help with snail and slug control. Geese and bantams

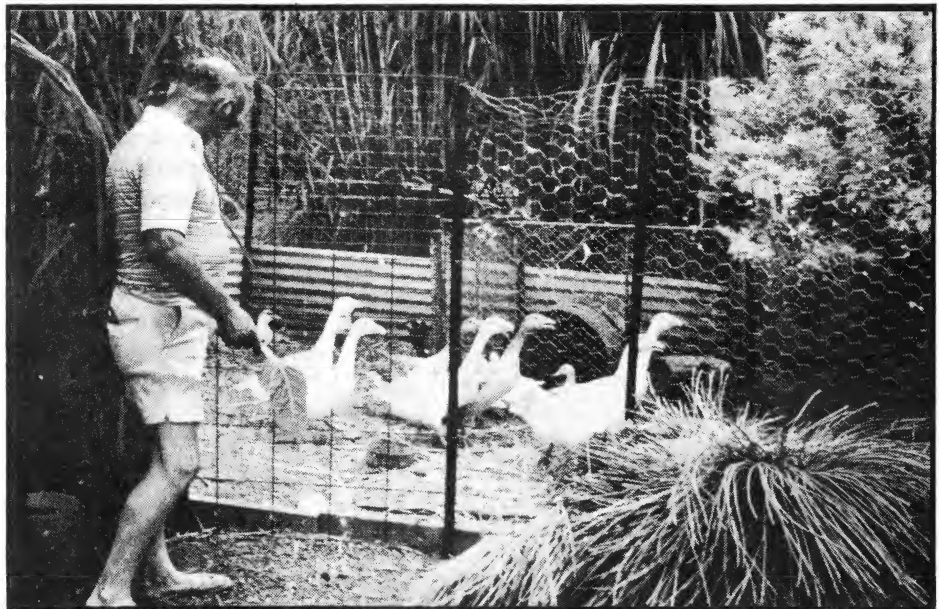
Fig. 2. Zone 2 — Shepperson's block.





Gerald on the verandah of his house. Deep verandahs on all sides of the house maximise location and climate advantages and minimise some of the problems. Note the pineapples and pawpaws on this north facing front verandah.

Bana grass provides shelter and fodder for poultry. Wormwood discourages insect pests. Gerald keeps ducks for meat and eggs and for help with snail and slug control. Other poultry kept include bantam fowls, pigeons and geese.



Raised beds are planted mainly with vegetables — here lettuces and elephant garlic set seed. Pumpkins and sweet potatoes thrive in manure laid over piles of weeds. Young citrus trees establish themselves sheltered by native plants and albizzia.

provide eggs, manure and meat, and pigeons manure and meat. Bantams, Gerald believes, are more hardy and disease resistant than other chooks and if the stock are becoming a little on the small side, using a couple of large hens with the bantam roosters soon brings the general size of the flock back up to a more acceptable size without cutting back too much on the disease resistance factor. There are now between 80 and 90 poultry on the block. At this stage there are no other livestock, but a yard and shed for goats are being built and there are plans for lambs in Zone 4 in the future, as the drawing (figure 1) shows. In all cases, manure and bedding waste from the livestock have a place in the system, contributing to the cover kept over the soil and helping to build up its fertility.

Encourage Self-propagation

There is a third principle also essential to the total environment concept. In any location, Gerald considers it important to encourage self-propagation of plants until a range of varieties especially suited to your own particular environment has been established. On his block tomatoes, sweet potatoes and cape gooseberries are already naturalised. He watches any variety which shows particular vigour. An especially prolific self-seeding bean, for instance, which was harvested the other day will have seeds saved for next year.

He keeps a lookout too for food plants growing untended on demolition sites or abandoned blocks. An obviously hardy egg tomato has been acquired this way as well as an old fashioned black grape which is disease resistant and tasty. Species which encourage predator build up or attract pests



An integrated environment. A pecan protected by an undisturbed melaleuca. Self set tomatoes, cape gooseberries and New Zealand spinach provide food and ground cover.

away from food crops are also retained. 'Don't pull up weeds until you're sure they have no place in your integrated environment,' he says. He was pulling up nightshade plants himself until he realised that ladybird beetles destroying his potato plants preferred the weed. Now he lets them have it and the potato plants have a new lease of life.

Looking at what the Shepperson family have achieved, it's hard to believe that the house was built only four years ago, many crops planted only three and a half years ago and the irrigation system installed only two and a half years ago. Although the Sheppersons know that total self-sufficiency is unlikely on a block their size and that some income and food must come in from outside, they believe that it is quite realistic to be able to get the bulk of food needs from their small property, with some to share. In fact they have already achieved this — they trade produce for horse manure and have spare fruit and vegetables to give away to friends.

Gerald occasionally runs day workshops during the year to show people how it's done. 'Starting right' is his theme. He also stresses the need to be realistic — 'towards self-sufficiency' is what we can aim for, he thinks. There's not much point in expecting full self-sufficiency in most people's situations and too many people get discouraged by their failure to achieve unrealistic ideals as well as by too great an eagerness to enjoy the produce without first establishing the total environment which is necessary to provide its context and support. After all, whatever is achieved is worthwhile if it has the most important bonus of healthy pesticide-free eating as a major objective. Seeing what Gerald and his family have achieved by deliberate planning and patience is really quite inspiring, especially when the patience he preaches, if his own example is anything to go by, bears its first fruits so quickly, comparatively speaking.

Gerald Shepperson is the librarian of the Permaculture Association of Western Australia, PO Box 430, Subiaco 6008. Ph: 09-417-2274. He is happy to share what he has learned from his traditional English rural education as well as his experiences in Australia.

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NUTRITIONAL THERAPY FOR COMMON AILMENTS

by Blackmores Communication Service, Sydney, NSW.

Let's look at some common complaints — what causes them and, most importantly, how to cure them!

ARTHRITIS

This results in inflammation and soreness of the joints. Osteoarthritis and rheumatoid arthritis are the two main types of the disease.

Osteoarthritis, usually found in elderly people, develops as a result of the continuous wearing away of a cartilage in a joint. Cartilage, which is a smooth soft, pearly tissue, covers the ends of the bones at the joints. It provides a smooth surface for the bones to slide against, allowing easy movement of the joints. As a result of injury or years of use, cartilage becomes thin and may disappear. When enough cartilage has worn away, the rough surfaces of the bones rub together causing pain and stiffness. Osteoarthritis usually affects the weight bearing joints such as the hip and knee. Symptoms of osteoarthritis include body stiffness and pain in the joints, especially during damp weather, in the morning or after strenuous activity.

Rheumatoid arthritis affects the entire body instead of just one joint. Onset of the disease is often associated with physical or emotional stress and usually occurs between the ages of 30 and 40. Rheumatoid arthritis destroys the cartilage and tissues in and around the joints and often the bone surfaces themselves. The body replaces the damaged tissue with scar tissue causing the spaces between the joints to become narrow and fuse together. This causes a stiffening and crippling onset of the disease. Symptoms of rheumatoid arthritis include swelling and pain in the joints, fatigue, anaemia, weight loss and fever. These symptoms often disappear and recur at a later date.

Exercise is important in both the prevention and treatment of arthritis because unused joints tend to stiffen. Good posture is also important to prevent stiffness and crippling. Poor posture can cause body weight to be distributed unevenly placing more stress on certain joints, thus resulting in unnecessary pain for the arthritic person.

Many nutritional cures for arthritis have been claimed, upon which research still continues. It is recommended that the arthritic patient have a well balanced diet in order to provide the body with all the nutrients it needs for repair. If the arthritic is overweight he or she should lose weight to reduce the stress on weight bearing joints.

Vitamin C is necessary to prevent the capillary walls in the joints from breaking down and causing bleeding, swelling and pain. Folic acid, vitamin B12 and iron may be helpful in treating the anaemia that can accompany arthritis. The frequency of liver disorders in arthritic patients may deter the conversion of carotene into vitamin A. Difficulty in assimilating carbohydrates suggests vitamin B deficiency. Treatment involves a diet high in raw fruits and vegetables, low in sodium. A number of mineral supplements, including calcium, phosphorus, potassium and sulphur, may also be helpful.

ASTHMA

A chronic respiratory condition, it is characterised by difficulty in breathing, frequent coughing and the feeling of

suffocation. An attack of asthma is often precipitated by physical or emotional stress, respiratory infections common in winter, air pollution, changes in temperature or humidity and exposure to fumes such as those of petrol or paint. It may also be related to low blood sugar, disorders of the adrenal glands or specific allergies.

Symptoms of asthma are tightness in the chest and difficulty in breathing usually accompanied by a whistling or wheezing sound; violent coughing often occurs as the lungs attempt to expel mucus. An attack can last from several minutes to several days.

Skin tests are often given to pinpoint the patient's allergic tendencies. Common offenders are pollen, animal hair, dust and certain foods. Proper nutrition is necessary and the asthmatic should eliminate from the diet those foods which may bring on an attack. A high fluid intake and the inhalation of steam may help to liquify the mucus and make it easier to expel from the air passages. Vitamin A is necessary for the general health of the lungs and together with vitamin E guards against visible and invisible air pollutants. The person should have a diet sufficient in vitamin B complex to avoid deficiency symptoms of nervousness which might bring on an asthma attack. The need for vitamin C is increased by stress and exposure to hot or cold weather, cigarette smoking and industrial air pollution. Various minerals and herbal complexes are also available.

SCIATICA

This term refers to severely painful spasms along the sciatic nerve, which runs from the back of the thigh down the inside of the leg to the ankle. Among the possible causes of sciatica are trauma or inflammation of the nerve itself, sprained joints in the lower back, rupture of a disc between the spinal bones or neuritis.

Treatment for sciatica includes rest and hot applications to the affected leg for relief of pain and inflammation. Vitamin B complex is essential for the health of nerve tissue. Vitamin E, cod liver oil and other herbal preparations containing celery, watercress and parsley are sometimes recommended.

HAYFEVER

A reaction of the mucous membranes of the eyes, nose and air passages to seasonal pollen and dust, or feathers, animal hair and other irritants, its symptoms include itching in the eyes, nose and throat, and clear watery discharge from the nose and eyes, frequent sneezing and nervous irritability. Alcoholic beverages and stressful situations may precipitate an attack of hayfever. The most effective treatment of hayfever is to avoid the irritant! Vitamin A however, is essential for the general health of the respiratory system. Some authorities believe that vitamin C in doses of 1000 mg or more daily can reduce symptoms. Vitamins B and E are valuable too.

Information courtesy of Blackmores Communications Service, 23 Rosebery St, Balgowlah 2083. Blackmores produce a wide range of vitamin and mineral products based on natural herbal ingredients. These are available in health food stores and pharmacies.



A Battery Lawnmower

by Michael Mitchell, Bassendean, WA.

As an occasional reader of *Grass Roots* I enjoy reading about how people can solve some of their problems with low cost and imagination. Other readers may benefit from an idea I've developed.

About two years ago I bought an old house with a very overgrown and rundown garden which frequently required a lawnmower. An electric mower has always appealed to me, but the long flex required is a disadvantage. I had an old Lucas C39 12V DC car generator which runs well as a motor on 24V, and decided to make a battery mower for my lawn.

The base was a metal meterbox; the wheels were non-adjustable for simplicity; the battery boxes were also smaller switchboxes bolted to the base. The handle was arc welded 25 mm (1 in) tube. The cutting disc bolted to the generator/motor spindle used ordinary Victa blades. Front and rear edges of the base were cut back to allow long grass to pass freely beneath the mower. An ammeter, fuse and switch were used in series with the two 12V standard car batteries. Windings (field and armature) on the generator/motor were connected in parallel.

I have used this mower now for over a year. The only disadvantage is the weight of the two batteries, which makes it heavier than a petrol mower, but you can mow the lawn at 6 a.m. without complaints! Current draw on short grass is only 5-10 amps at 24V, rising to 30 amps in wet long grass. Batteries probably should be of the deep cycle type for this use, but the normal car batteries used have lasted so far (1 year) and do not lose power during mowing time, normally ½ hr-40 minutes.

FUN AND IDEAS FOR LIVING

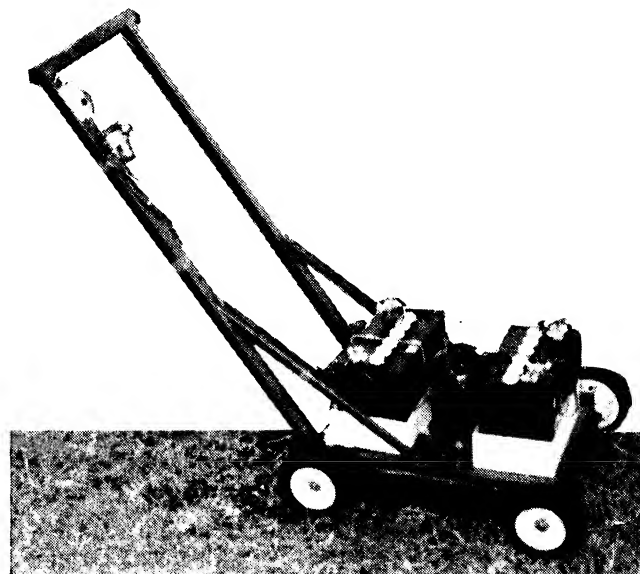
This is the theme for the next Moora Moora Festival, lasting from midday to midnight on Saturday 25th February 1989. Moora Moora is a long established cooperative community 16 km south of Healesville (along Don Road). Our annual festival has been enjoyed by many people over the years. It didn't happen in 1988, so we are determined to make the 1989 Festival better than ever.

Above all else the Festival is a family day with an emphasis on fun. There is a programme of music and dance throughout the day finishing with a bush dance to a live band in the evening. A Health and Healing area offers activities like massage and relaxation. There are demonstrations and workshops of all kinds, including horse care, sheep shearing, crafts and building skills, lots of activities for children and delicious, healthy food for sale.

Areas of interest will include building, alternative technology, health and healing, conservation/ecology, organic gardening/farming, community schooling and arts and crafts. Tours of the 243 ha (600 ac) property will show the many unusual buildings, applications of alternative technology and lovely views.

Admission prices have been kept down — \$20/family, \$9/adult, \$4.50/child or concession. Everything is free except food and items sold by invited outside groups.

For more information about the Festival write to Moora Moora, PO Box 214, Healesville 3777. Ph: 059-623-749 AH.



My battery lawnmower. Although heavier to push around than a conventional petrol mower I can use it any hour of the day (or night!) without disturbing neighbours and being on the end of a volley of rotten tomatoes.

HANDY HINT

Use old yoghurt pots to set individual jellies for children.

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MAKE YOUR OWN ORGANIC FLOWER ESSENCES

by Pamela Davey, Shepparton, Vic.

Making your own organic perfumes is not as difficult as it sounds. Why make perfume when you can buy it? Well, today most flower perfumes are synthetic so imagine the quantity of flowers needed to supply the world's cosmetic industry! Because of the very high cost of natural flower oils synthetic fragrances are now used in everything. You can make your own pure perfume oil by the process of maceration. This has been used as far back as the fourteenth century and is still the method used in France today. Flowers are macerated in common lard in several batches, then the pomade (as it is called) is dissolved in alcohol. The alcohol takes up the floral essence and leaves the lard undissolved.

You will need a large supply of the flower you have chosen, — for example apple blossom, carnation, cassia, freesia, frangipani, honeysuckle, hyacinth, jasmine, jonquil, lavender, gardenia, orange blossom, lilies, marigolds, mimosa, narcissus, roses, tuberose, violet, or the leaves of eucalyptus, bay, pine needles, mint or even the bark of cedar, pine or cinnamon.

EQUIPMENT

500 ml (18 fl oz) glass pyrex retort with rubber stopper
kitchen strainer
cheesecloth or pantihose
filter papers (I use coffee filters)
undenatured ethyl alcohol — available from chemists as rubbing alcohol.

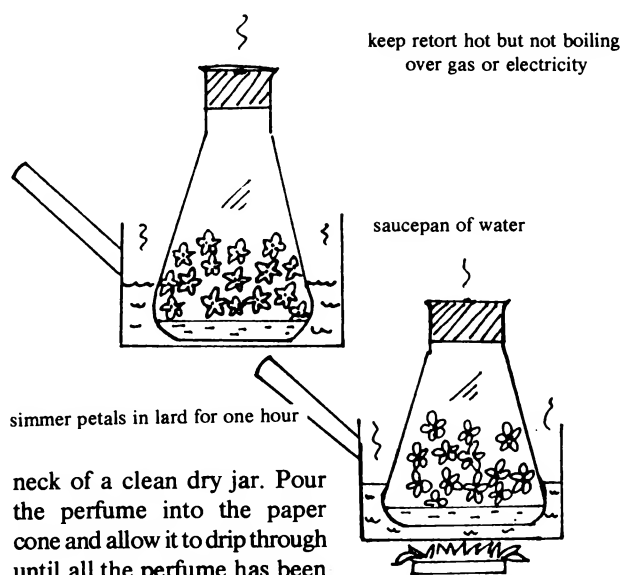
METHOD

Gather 400 g (14 oz) of flower petals without picking buds, stems or leaves. Place 125 g (4 oz) of common lard in a glass pyrex retort, and place the retort in a saucepan of water. Gradually heat without letting it boil until the lard melts. Loosely fill the retort with the petals, place the rubber stopper in the neck, place your finger over the hole in the rubber stopper and shake the petals vigorously. The flowers must stand in the lard for one hour, just keeping hot. After one hour, strain the petals from the lard using a kitchen strainer (or better still a piece of cheesecloth) squeezing the oil and lard out of the petals. While still warm, put the strained lard back into the retort and repeat the procedure, until at least 3 batches of flowers have been macerated. Seven or eight batches will give a good perfume. Strain the last batch into a dish and refrigerate. This pomade can be used as a solid perfume.

For liquid perfume add 40 ml (1½ fl oz) high strength undenatured ethyl alcohol to the pomade and mix thoroughly using a kitchen spatula or spoon. After 15 minutes slow mixing, tip the dish at an angle to allow the perfume to accumulate in a pool. Tip the perfume into a 40 ml (1½ oz) vial and freeze for at least 2 hours. Fold a filter paper into a cone shape and place in the

strain the lard from each batch of petals

filter paper



neck of a clean dry jar. Pour the perfume into the paper cone and allow it to drip through until all the perfume has been filtered. This removes all the 'petal wax' and cloudiness. Pour the filtered perfume into your perfume vial. It can be used alone, or mixed with other fragrances to make your own individual fragrance. This is called an 'extrait' and numbered with the number of batches of flowers processed through the lard so for eight batches of jasmine, the label would read 'Extrait de Jasmine No. 8'.



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AROMATICS FOR HEALTH AND BEAUTY

by Gwen Rogerson, Heidelberg, Vic.

Now the bathroom can be transformed into a luxury treatment centre simply by using aromatic oils in the bath water to soothe, refresh and relax, or to enhance a particular mood. To benefit fully make sure the room is warm, comfortable, and has subdued lighting. Music at a low level may also be used. When the bath is ready add oil or oils to a maximum of 8 drops. Of course fragrances are intensely personal but the following table will serve as a guide.

Whichever oil you use remember that cool baths are stimulating, warm baths are relaxing and hot baths are weakening and enervating.

OTHER USES OF ESSENTIAL OILS

- Linen cupboard or drawers — a few drops of lavender or geranium at the bottom of each drawer or shelf for delicate fragrance.
- Mini pomanders — tie a cottonwool ball in a small piece

of fabric and suspend in a wardrobe with a few drops of patchouli or lavender oil on the ball.

- Room evaporators — a few drops of either lemon, orange, lavender or geranium put on a tissue or piece of fabric will diffuse through the room.

- Perfumed stationery — add a few drops of oil on a tissue or piece of fabric and enclose with writing material.

- Mood rooms — relaxation can be helped by a few drops of lavender. A room for meditation, yoga, or a place to clear the mind can be achieved with patchouli.

- Tired and aching muscles rub — 30 parts base oil to 1 part rosemary.

Essential oils should be stored in a cool dark place and the cap replaced after use.

If any readers would like to know more about essential oils, their uses and availability please contact me: Gwen Rogerson, 95 The Right, Heidelberg 3084. Ph: 03-459-0208.

Table 1. Uses and effects of aromatic oils.

Oil	Effects	Blends with
Basil	refreshing, stimulating	rosemary, geranium, patchouli
Cedarwood	calms, soothes, warms	cypress, juniper berry, rosemary
Cypress	relaxing, refreshing, astringent	lavender, cedarwood, sandalwood
Geranium	relaxes, lifts depression, helps to alleviate stress	basil, lemon, orange
Juniper berry	soothes, tones, helps tired muscles	basil, cypress, lavender, sandalwood
Lavender	relaxes, calms, helps to reduce stress	basil, cypress, marjoram, rosemary, ylang ylang
Lemon	refreshing, invigorating, cleansing	geranium, lavender, orange, peppermint
Marjoram	lifts depression, calms, helps to clear the lungs	lavender, rosemary
Orange	refreshes, stimulates	geranium, lemon
Patchouli	meditative, mystic, captivating	cedarwood, geranium, lavender, sandalwood
Peppermint	refreshes, purifies, invigorates	basil, lavender, rosemary
Rosemary	clears the head and lungs, gives positive feelings	lavender, marjoram, peppermint
Sandalwood	warming, spiritually masculine	cypress, juniper, lavender, ylang ylang
Ylang ylang	indulgent, voluptuous, pervasive, erotic	basil, lavender, sandalwood

AUSTRALIAN AROMATHERAPY ASSOCIATION

by Simon and Clare Lorde, Lane Cove, NSW.

We have practised the art of aromatherapy in Australia since 1951 and are the tutoring principals of Australia's first and only diploma correspondence course in this field. We and many qualified aromatherapists are aware of and disturbed by the increasing number of unqualified persons purporting to be practitioners of our therapy. Alternative therapists in many areas of healing are also concerned by the information currently circulating that the Government is planning a licence system for all persons working in fields of natural healing. When this law takes effect, we are more concerned that, as there is no body with criteria to give guidelines for such a licence in aromatherapy, unqualified persons could become licensed and bring disrepute on those who are qualified practitioners.

To redress this situation, and to protect genuine aromatherapists, The Australian Association of Aromatherapy, (AAA) has been formed. A quarterly newssheet will be mailed to all members and free advertising of aromatherapy and

allied services will be available to all members. We welcome members' letters and articles for publication. Qualified aromatherapists wishing to become members are invited to apply, tendering a copy of certificate or diploma from a recognised school or person. When accepted, a certificate of membership will be issued for framing and display in rooms. A code of ethics will be shortly devised after consultation with members, and ideas and suggestions for this are welcome.

Our motto 'Experto Crede' is from the Latin, and means 'trust one who has experience'. We invite all aromatherapists to write to us for further information and an application form. Suggested fee scales are available to members, as are sources of supply for wholesale essence purchases etc. For those seeking qualification in this field, we can provide information on appropriate courses run by qualified practitioners.

Further information can be obtained from the Association, PO Box 80, Lane Cove 2066. Ph: 02-699-6166.

IDEAS FOR LATE SUMMER SOWING

Don't overlook the importance of mulching at this time of year. Many areas of Australia experience hot, dry weather through until mid or late autumn, so it will be important to conserve as much water as possible in the garden. Mulching will protect plants' roots and prevent them drying out so quickly in the heat of the Australian summer.

The type of mulch you use is very much a personal choice, dictated as much by what's readily available as by the effect you want to create. Sawdust, straw, dead leaves, newspapers, old pieces of carpet, even rocks can be used as a moisture retaining layer around plants and trees. Some of these mulches will readily break down into organic matter to enrich the soil, others will need to be checked regularly in case they have become havens for pests such as slugs and snails which will be attracted to your new seedlings.

Before mulching remove any weeds, lightly water and break up soil surface to allow better moisture penetration. As organic mulch breaks down top it up to maintain a depth of about 10 cm (4 in).

Crops will only develop quickly if you provide them with the best possible growing conditions. The soil should be well prepared by early digging, and then by breaking it down to a fine tilth at sowing time — the aim is to break up the soil into small even-sized particles to a depth of about 5 cm (2 in). You can often get a good tilth simply by raking, but heavy or light soil may take more preparation. Light sandy soil should have organic matter added to prevent it compacting and becoming impervious to water. Heavy soils may need to be manually cultivated to shatter any lumps.

Having carefully prepared the soil, you are now ready to sow the next batch of interesting and unusual vegetables and herbs selected from the latest mail order seed catalogues.

VEGETABLES

Salsify

Unfamiliar to many, but not a new vegetable — it was grown in France and Germany over 700 years ago — is the vegetable oyster or salsify. This delicious root vegetable can be eaten cooked or raw and its taste is reminiscent of oysters — hence its popular name. It is slow growing and tends to fork unless the soil is cultivated to a good depth, but it is otherwise very easy to grow. Salsify is one of four individually packed lots of seed in Thompson and Morgan's Gourmet Vegetable Pack (the others being cabbage red, kohlrabi and land cress) and Digger's Seeds sell it in individual packets.

Sunflower

This is not strictly speaking a vegetable, but is often treated as such in the seed catalogues. Sunflower seeds contain twice the protein of wheat and in Russia they are popular snacks. Its gardening uses are almost limitless. Children love to grow them to try to beat the world height record of 7.16 m (23 ft 6 in). Sunflower seeds are the best egg producing food known for poultry. They provide an excellent living bean pole or hedgerow for climbing beans and you can save space by growing them amongst pumpkins and squash which provide a vital living mulch. Digger's Seeds offer a variety called 'Giant Russian' and Eden Seeds, who specialise in non-hybrid seeds, sell sunflower seeds at 90¢ a packet. Sunflowers

should be grown during the warmer months — unless you live in northern Australia when you can grow them all year round — so order your seeds now ready for next season. You may find that the beginning of February is not too late to sow sunflower seed in order to produce a crop before winter.

Carrots

The ever popular vegetables, valued for their vitamin A content, now come in a wide array of sizes, colours and shapes. Phoenix Seeds offers 'Kintoki', a long pointed variety favoured in Japan for its sweetness and its deep crimson colour (can be sown until early autumn), while Thompson and Morgan's selection includes 'Easigrow', a ball-shaped carrot that lives up to its name under even the worst growing conditions.

HERBS

The following plants are both annuals and would normally be sown in spring, however there is still time if you plant them by early February.

Feverfew

This lovely low growing annual has clusters of white daisies, making it an attractive addition to any garden. Feverfew is now gaining increasing credibility in the UK for its ability to provide relief for migraine sufferers. Seeds are available from Phoenix Seeds and Teatree Seeds.

Borage

This coarse and hairy annual grows to about 50 cm (1 ft 8 in) and has attractive blue, star-shaped flowers. The young leaves have a flavour similar to that of cucumber and are used as a garnish for salads and drinks. It can also be used as a vegetable, cooked the same way as spinach. Seeds are available from Broersen Seeds and Bulbs, Eden Seeds and Kings Seeds.

Suppliers

Kings Seeds, PO Box 14, Glenbrook 2773.

Thompson and Morgan, PO Box 50, Jannali 2226. Ph: 02-533-3693.


Broersen Seeds and Bulbs, 365-367 Monbulk Road, Silvan 3795. Ph: 03-737-9202.

Digger's Seeds, 105 Latrobe Parade, Dromana 3936. Ph: 059-871-877.

Eden Seeds, MS 316, Gympie 4570. Ph: 071-865-230.

Teatree Seeds, Wallace Road, Beachmere 4510. Ph: 071-968-441.

Phoenix Seeds, PO Box 9, Stanley 7331. Ph: 004-581-105.



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MAKING A GOAT HARNESS

by Keryn Summers, Kallangur, Qld.

V L Armstrong in GR 57 was enquiring about a goat harness, so as well as answering that letter directly, I thought other readers might be interested in knowing how to make one themselves.

Basically all that would be required is a girth with a nice comfortable wide piece on the top, maybe padded with thick felt. Two terrets (metal rings) would have to be placed on top for the reins to go through (figure 1). Also on the girth you would require a tug stop. This is a loop of leather which the shaft sits in and on the shaft is a tug which stops the shaft from going any further forward than it is supposed to (see figure 2).

Fig. 1. The goat in harness

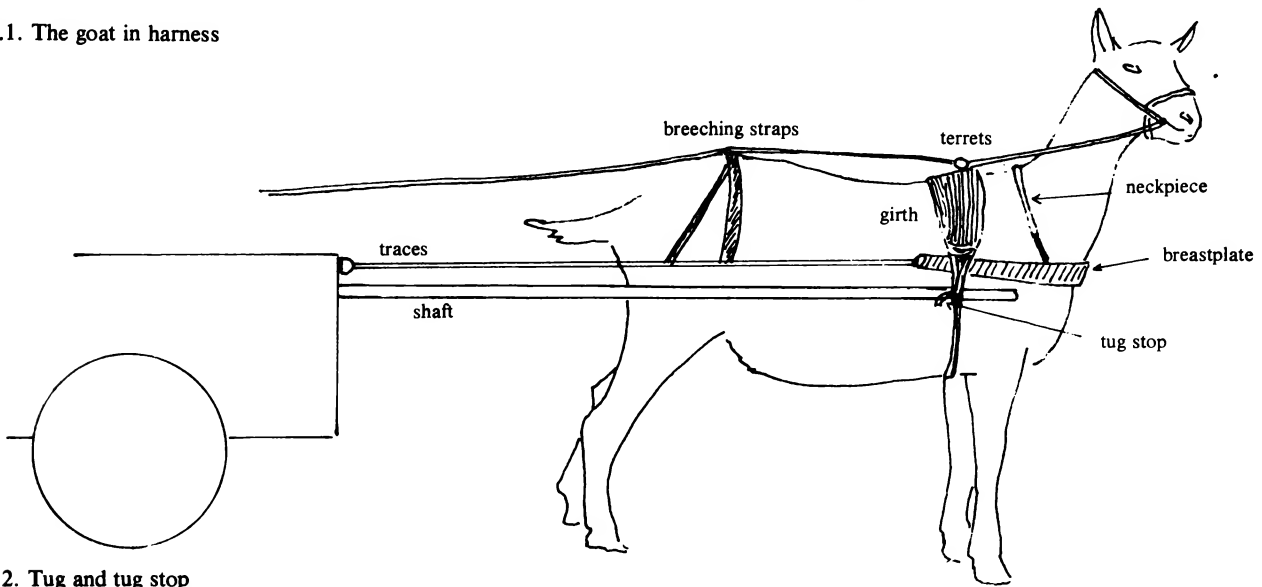


Fig. 2. Tug and tug stop

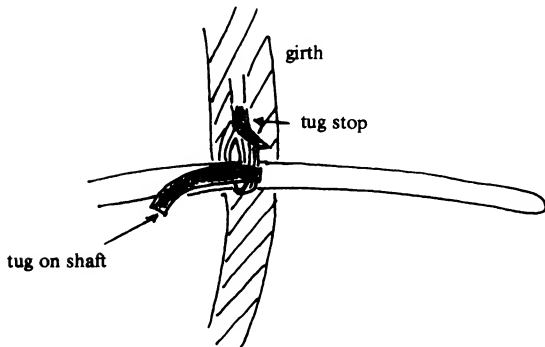
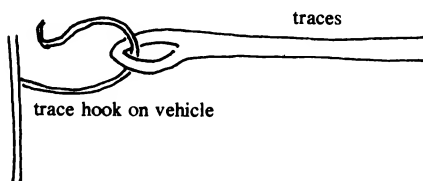


Fig. 3. Traces attached to vehicle



In GR 60 p. 45 Pat Coleby also gives advice on making an economical harness.

The girth would have to be adjustable. A breastplate would then be required with traces attached which in turn are attached to the vehicle (figure 3). The traces are made of very strong double thickness leather (usually held together with 4 rows of stitching).

A neckpiece is required for the breastplate as this is what holds it up. It is a good idea for the neckpiece to be adjustable as well. Breeching straps may also be necessary to hold the traces up at the back end of the goat (figure 1).

What bridle you use is up to you but a bit probably won't be necessary. Happy goating.

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Solar Panels

by Christine Taylor, Black Forest, SA.

Following the two articles in GR 60 by Anne and Robin Hughes and Geoff Bradshaw about their experiences in living without mains electricity, you may be interested in some of the discoveries we have made about the solar panels we installed eighteen months ago.

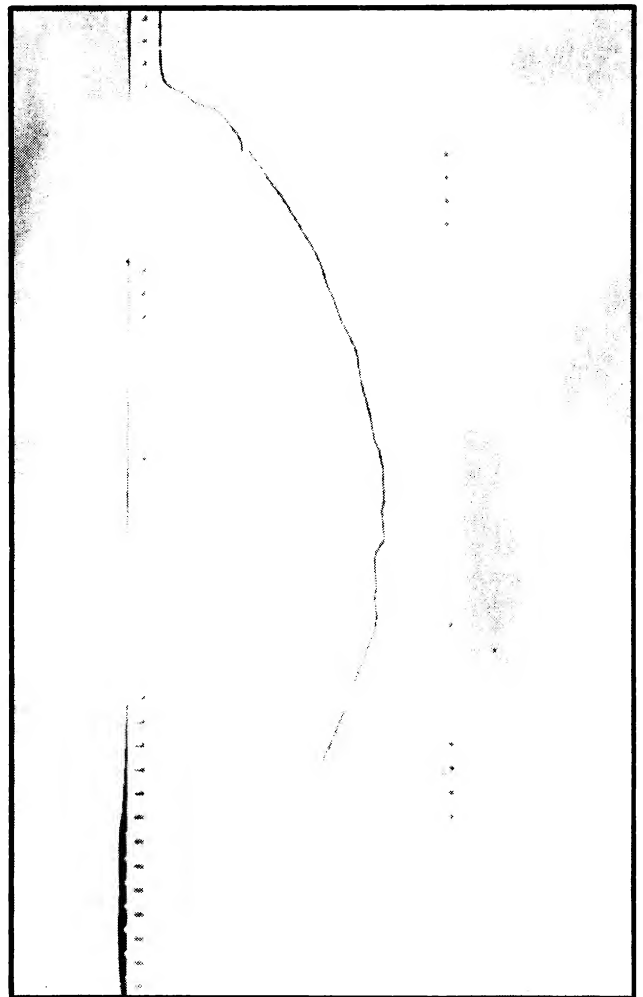
Like the Hughes and the Bradshaws we wished, or were obliged, to be independent of commercial power. We are still in the same situation and will remain so in the foreseeable future. Our block is one of those in 'delicate' areas that the government has decreed will not be less than 30 hectares (75 acres) in size. As we are several kilometres from the nearest sub-station, and the distance between our houses must be so great we will only ever be able to have power from the ETSA grid at a cost of \$10,000 or more for each block unless the government changes the policy for the area and allows smaller blocks. The area is protected because it has a low rainfall, also because it contains some of the ever-diminishing areas of almost natural scrub left in South Australia. We are about 4 kilometres (2½ miles) from the Murray and about as far as the axemen ranged in their search for wood to feed the boilers of the paddle steamers. Since the days of paddle steamers waned only bushfires and maybe a few local cattle have affected the natural vegetation. This is why the government wants to keep the area as untouched as possible. It is also why we love it there.

Nevertheless, there are some aspects of modern living that are hard to do without. We used gas lamps when we first went there but do appreciate the better light available from an electric light. Our ancestors timed their days to daylight but people now seem to have a different sort of timeclock. We opted for a 12-volt system for most of our needs. One incentive for this decision was that a friend had a wind generator and tower for which he had no use! The wind generator along with a couple of solar panels provide us with most of our lighting needs and run a car cassette player and radio.

We set up the solar panels particularly to provide the power for the pumps on the automatic watering system. As we are not on our block all the time but the watering is turned on every evening, we needed an extra power source for this load. My husband Geoff is not happy about leaving the wind generator on all the time when we are not there as it is possible for the batteries to be damaged by overcharging. The wind generator itself can also be liable to damage in gale force winds. If you are on the spot you can protect things, but when you are 130 km (80 miles) away, you can't. One pump for the watering system comes on each night to fill the overhead tank while the second, a smaller submersible pump, is in the overhead tank. With a solenoid valve to open and close the outlet(s) our plants are watered automatically. We are using a pipe-in pipe-out marine pump, a Rule, made in the USA, which draws 12 amps on 12 volts to pump up to a 450 lt (100 gal) header tank 3½ m (12 ft) up. The booster pump is a Rule bilge pump and draws 2 amps on 12 volts. To cover this regular drain on the batteries which were not being recharged when we were not there we needed a passive recharging

system. Solar panels were ideal for us. We have two panels, each of which will give us 0.45 amp at 18 volts in full sunlight. This output is regulated to 14.5 volts with a solid state shunt regulator (see diagram 1). This easily keeps the battery from being flattened if we are away for a long period.

Geoff has worked with electricity all his life so he was curious to know just how well the solar panels worked and what effect clouds had on their output. To investigate this he used a recording ammeter. One of the charts we got from this can be seen in photo 1. The one you can see here is one showing full sunlight in the middle of winter (July 13) and shows that even in winter the sun is bright enough to produce 0.8 amps from two panels in the middle of the day and to average about 0.4 amps for the eight hours. This is enough energy to replace the amount used by the pumps which run for only five or six minutes at a time. An interesting point you may notice is the little bump in the record at each end. We could not work out what this could be until we realised that one panel 'sees' the sun before the other in the morning and



Output even in winter is adequate when both panels are in sunlight.

AN EXPLANATION OF DIAGRAM 1.

The basis of the regulator is the integrated circuit (LM723, see diagram b). The notched end defines the position of connection pin No. 1. Pins are numbered consecutively around body as shown. Pin spacing is 2.54 mm ($1/10$ in) along length and 7.6 mm ($3/10$ in) across body. This IC has within it a reference voltage, a comparator, and an error amplifier. A sample of the battery voltage is applied to pin 5 of the IC, and is compared internally with the reference voltage from pin 6. The trimpot (VR) determines how much of this reference voltage is fed to pin 4, thus controlling the error output on pin 9. The error voltage (i.e. the difference between the reference and battery voltages) is applied to the two transistor combination (BD139/2N3055) so that the internal resistance of the 2N3055 decreases as the battery voltage rises, which causes the voltage of the solar panels to fall due to the panels' internal resistance. This means that the battery cannot be over-charged. The diode (MR754) replaces a mechanical isolating switch and prevents the battery discharging back into the panel because a diode will allow a current to flow through it in one direction only (the direction of the arrowhead).

Note that the regulator power is obtained from the solar panel, not from the battery. This is a shunt type regulator and can only be used with a power source that has an appreciable internal resistance. Based on current prices (October 1988) the entire regulator should cost under \$20.

The values of resistors are not written on them but can be read from the coloured bands (see diagram a). All resistor values are given in ohms, the multiplier symbol replacing the decimal point when the value is shown on a circuit diagram e.g.

6k8 means 6800 ohms (k meaning kilo = 1000).

330R means 330 ohms.

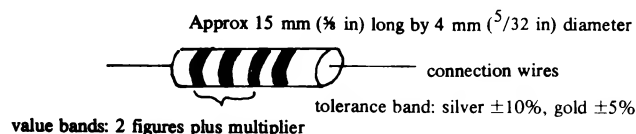
The numbers and the multiplier are each shown by a different coloured band on the resistor.

Colour	Figures	Multiplier
black	0	x 1
brown	1	x 10
red	2	x 100
orange	3	x 1000
yellow	4	x 10,000
green	5	x 100,000
blue	6	x 1,000,000
purple	7	x 10,000,000
grey	8	
white	9	

For this project, tolerance is not important so we are only concerned with the three 'value bands'. These are normally close to the end and are read in sequence from that end. The resistors for the solar panel regulator would be marked as follows:

Value	First band	Second band	Third band
330R	orange	orange	brown
1k	brown	black	red
1k8	brown	grey	red
4k7	yellow	purple	red
6k8	blue	grey	red

Diagram a. Resistors.

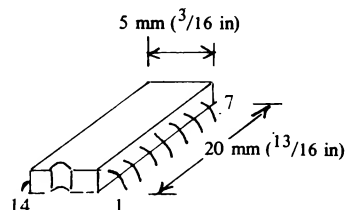


The capacitor may be marked in several ways. Its value in nanofarads (one thousand millionth of a farad, the standard measure of electrical capacitance) is 4.7. This may be written as 4n7 or 0.0047 or as 473 (in this case the 3 is the multiplier, as in diagram a).

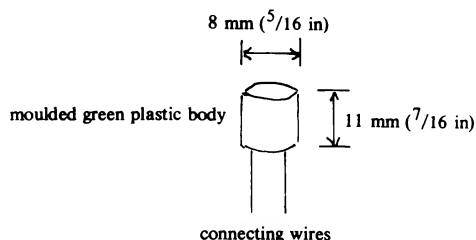
Details of the other components are shown in diagram b.

Diagram b. Other components.

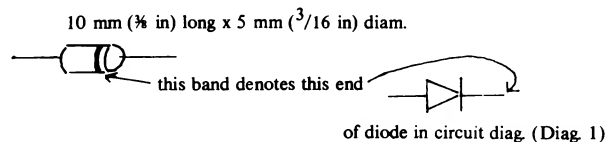
Integrated circuit, LM723 or equivalent



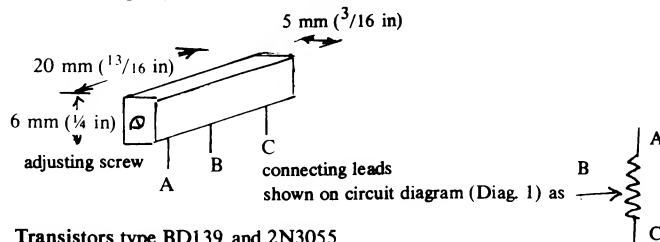
Capacitor, 4n7, 100 volt 'Greencap'



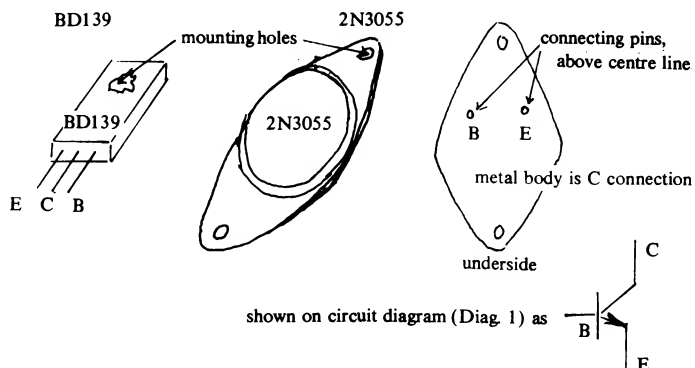
Diode, MR754 or equiv.



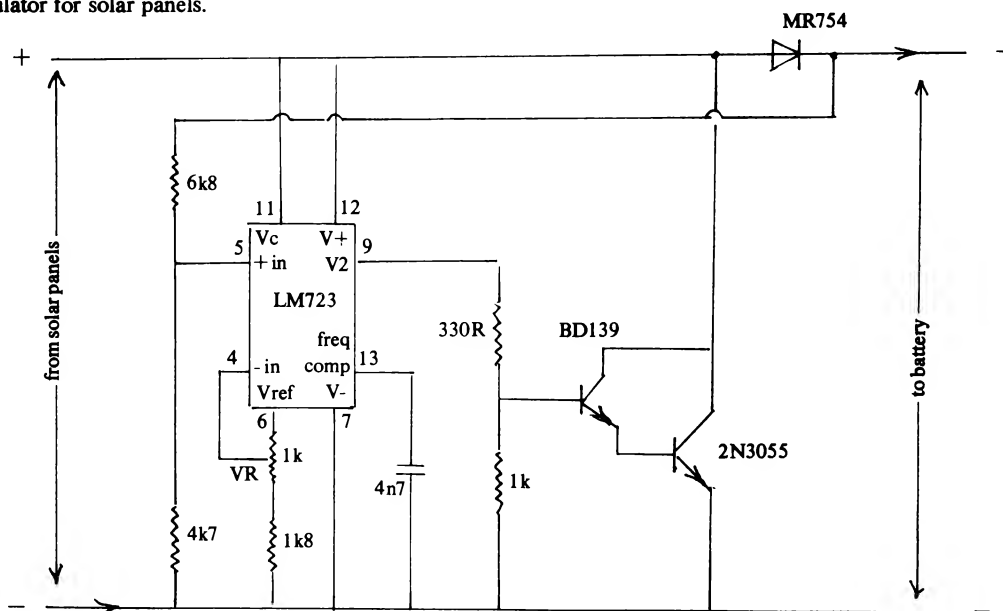
10 turn trimpot (VR), 1k (1000 ohms).



Transistors type BD139 and 2N3055



Diag. 1. Regulator for solar panels.



Notes:

1. Maximum output 45 watts for 12 volt system.
2. VR is ten-turn trimpot to set output voltage at battery terminals. Set to 14.4 volts with battery disconnected.
3. Mount transistors 2N3055 and BD139 on (but insulate from) common heatsink. Minimum area of heatsink 80 sq cm (12 in²) — preferably extruded aluminium section, flat in centre for mounting transistors, balance heat radiating fins. Mount so air can flow freely over it.
4. Rest of circuit can be constructed on 2.5 mm ($\frac{1}{10}$ in) vero-board (only if you know how to use it) or matrix board. Both have holes correctly spaced for mounting electronic components. Short lengths of coloured 'hookup' wire for connections between components can be bought with matrix board.
5. All resistors 1 watt rating.
6. All connections should be soldered, not just twisted.

Key:

- resistors
- capacitor (or condensor)
- diode
- VR trimpot
- Vref reference voltage
- 2N3055 transistors
- BD139
- LM723 integrated circuit (IC)

'loses' it sooner at night because of the way they are mounted. There is a rapid increase in output as soon as both panels are producing and a drop when one ceases to produce.

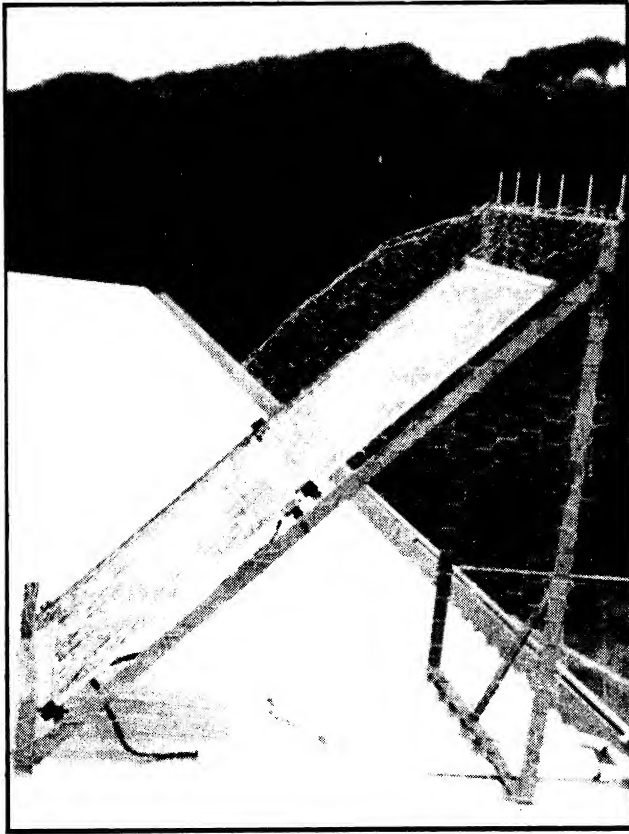
We have other charts showing the effect of clouds that I have not included here. Basically, the output drops but never disappears altogether as the clouds cover the sun. Even with full cloud there is some output from the panels. It is also noticeable that when the wind generator is operating the output from the solar panels falls. This is because of the regulator in the system and the unregulated generator. It is so that the battery will not be damaged by over charging that we have a regulator in the solar system. At the same time, Geoff watches the wind generator like a hawk when it is running.

We have a two storey building (see *Getting It All Together* GR 39), so our panels are up high, which puts them well out of any shadow. Geoff made a frame out of angle iron that bolts through the roof and allows the panels to be covered with chicken wire to keep the birds off (see photo 2). We were a bit worried that the birds might peck through the plastic covered cables as this has been known to happen. It may be the bright colours that attract them, but whatever it is we didn't want it to happen. As you can see the panels are mounted at an angle. The size of this angle depends on where you live. It should be

about the same as your latitude (your distance north or south of the equator). Swan Reach is 34 degrees south so we set our panels at 34 degrees down from the horizontal (see diagram 2). We faced the panels north so that in the middle of winter the sun's rays are at right angles to the face of the panels. In summer, when the sun is further south, the rays strike the panels at a steeper angle but as the sun is closer and therefore brighter, the steeper angle does not stop them working.

In fact, we did think the panels were not getting enough sunlight this summer, as they did not seem to be charging properly. We do not keep the recorder on the panels, but we do have an ammeter inside the building which shows how much the panels are producing. Just before Christmas we noticed that the ammeter was reading about 0.2 amp on a day that was reasonably sunny, so we kept an eye on the ammeter for the next few days and found that it never showed more than that very low reading.

At first Geoff thought the connections might have been faulty but they checked out all right. He even considered changing the design of the mounting so that the panels could be swung up to nearly flat for the summer and back to 34 degrees for winter, but we did not have to do this and in fact it is definitely not necessary to change the angle of the panels. It



Each panel is set at 34° (the same as the latitude) and covered in chicken wire to stop birds eating the plastic cables.

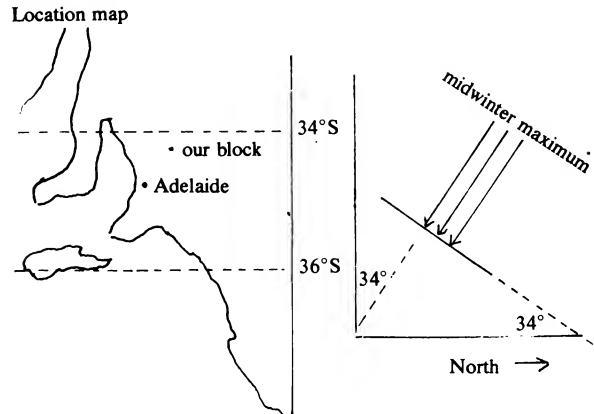
was when Geoff tested all the leads and the panels themselves for their resistance that he found the trouble. Both the panels had developed a large internal resistance, which meant that they were dissipating all the energy they were producing to overcome their own internal resistance and there was none left over for our batteries. We do not know just why the solar panels developed this resistance but we were pleasantly surprised when the manufacturer replaced both panels without any quibbles. After this experience I do suggest that if any of you have solar panels installed you have an ammeter in circuit and that you keep an eye on the charge rate of the panels. If it drops away significantly have them tested for internal resistance.

The internal resistance can be determined using a voltmeter and an ammeter. First disconnect the solar panel from any other load, including the regulator. Now, assuming the sun is shining, measure the no-load output voltage of the solar panel. Call this reading $E(oc)$. Connect some load, perhaps a globe, to the panel, and measure the output voltage of the panel. Call this $E(I)$, and the load current $I(I)$. Now, the internal resistance of the solar panel can be calculated from the equation:

$$R(int) = (E(oc) - E(I))/I(I)$$

It would be advisable to make this measurement on the panels when they are new, so that if they are suspect at a later date you have a value with which to compare the later reading. If the later value of internal resistance is higher by more than 10 percent than the original value you may have reason to watch that panel and to check its output frequently. (Our panels went from 15 ohms to 150 ohms before we

Diag. 2. How to calculate correct angle for solar panels.

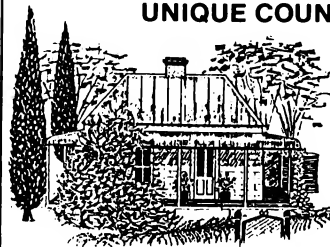


realised something was amiss. This is a difference of 1000 percent!) If you find that you do have one or more panels that are not behaving properly I suggest you return them to your supplier. You may be as fortunate as we were.

Despite our problems we do recommend solar panels for carrying small recurring loads. For a permanent dwelling the cost of panels is frightening, but the cost is falling almost daily as more are being used. At present prices a back-up generator is needed, even if you have a wind generator, if the domestic appliances are even a fraction of those used in the city.

I mentioned earlier the hawk-like watch Geoff keeps on the wind generator. Our generator has no electrical regulator and no blade-furling governing device to prevent over-speeding. Geoff has designed an electrical regulator but will not fit it because the circumstances under which it would work — when the battery was fully charged — would leave the generator with no load on it. A generator with no load can easily over-speed should the wind blow strongly, which would be the most likely reason the generator had been able to bring the battery up to full charge in the first place. The inevitable result of this over-speeding is damaged armature windings and ruined commutator. This is why we do not let the generator run when we are not present. We release the tail vane to pull the propellor out of the wind last thing before we leave and pull it into the wind when we return. This is done from the ground in the usual way. We do the same thing if the battery is fully charged or the wind is very strong while we are there.

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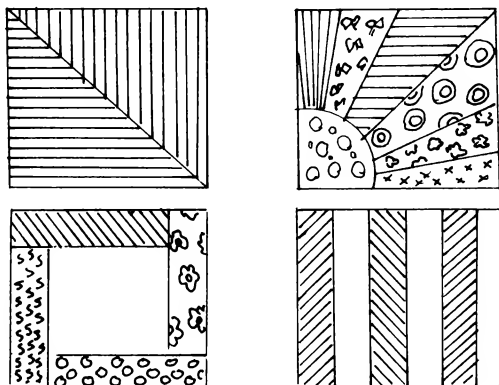
For auction 23rd February 1989. Phone Lesley Barnsley of Richardson & Wrench Yass 062-262-788 or 062-261-565 AH.

Patchwork Mai-tai Baby Sling

by Marion Boetje, Brooweena, Qld.

Simple mai-tai baby slings lend themselves ideally to the use of patchwork motifs. They are best made from cotton which is cool and easily washed. A lightweight baby sling is much better for most Australian conditions than expensive dacron-padded 'deluxe' models which make for a very sweaty baby (and parent). These mai-tais can be worn equally comfortably on the back or front, with the baby facing out or in — you can't get more versatile than that!

Fig. 1. Suggested motifs for back piece.



MATERIALS

Calico pieces:

- 1 back 30 x 30 cm (12 x 12 in)
- 1 loop 4 x 6 cm (1½ x 2¼ in)
- 1 support band 4 x 26 cm (1½ x 10¼ in)
- 1 crotch piece 12 x 28 cm (5 x 11 in)
- 1 bottom band 12 x 60 cm (5 x 24 in)
- 1 top band 12 x 350 cm (5 in x 11 ft 6 in)
- 1 made-up patchwork motif (figure 1) 30 x 30 cm (12 x 12 in)
- 2 'D' rings (from craft shops or saddlers) or curtain rings
- 22 cm (8½ in) length 6 mm (¼ in) elastic
- 1 bikini hook
- length 6 mm (¼ in) foam rubber 5 x 48 cm (2 x 19 in)
- length 6 mm (¼ in) foam rubber 5 x 100 cm (2 x 39 in)

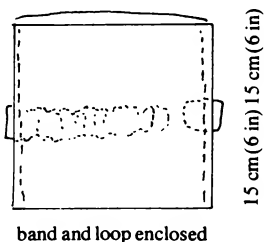
METHOD

Allow 1 cm (½ in) seam allowances throughout.



Elasticised support band and loop: fold 26 cm (10¼ in) piece of calico in half lengthwise. Stitch along side. Turn right side out. Insert elastic, gathering up calico. Stitch elastic at either end. Attach bikini hook to one end. Fold 6 cm (2¼ in) piece of calico in half lengthwise. Stitch long side. Turn right side out. Fold in half.

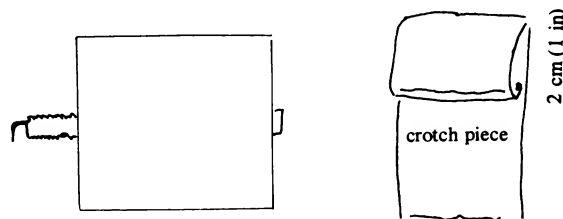
Back: place patchwork motif (see figure 1) and matching calico piece right sides together. Insert support band and loop in sides as shown, facing inward between patchwork and backing piece. Stitch both sides.



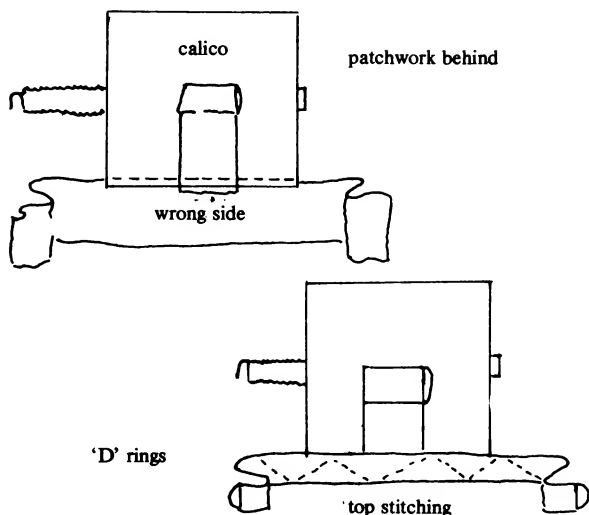
Two views of the mai-tai in use, showing the baby securely and comfortably supported.

Turn right side out, so support band and loop protrude from side seams of back piece.

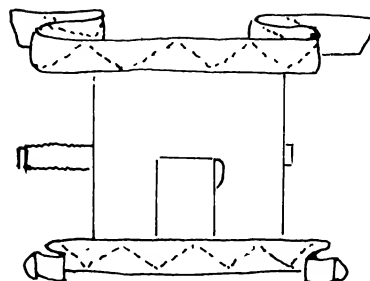
Crotch piece: hem both long sides of crotch piece. Turn down



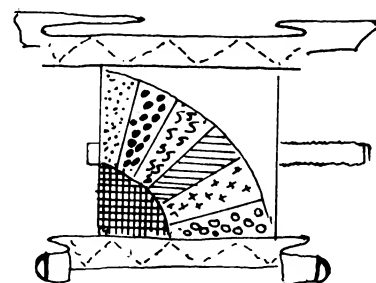
1 cm (½ in) on one end, then stitch a 2 cm (1 in) hem for support band to pass through.



Bottom band: centre bottom band on back (patchwork side) and pin with right sides together. Pin on crotch piece as shown (calico side). Stitch bottom band and crotch piece to back Centre shorter foam length on bottom band. Fold calico up over foam and turn down seam allowance enclosing raw edge of back and crotch piece. Stitch entire length of bottom band. Top stitch through foam and calico as shown. Attach 'D' rings at either end.



Completed mai-tai.



Top band: centre top band on top of mai-tai. Stitch, right sides together. Centre foam as in bottom band. Turn over seam allowance, fold up over calico and stitch entire length of top band, mitring ends. Top stitch through foam and calico as shown for bottom band.

Lay mai-tai on a bed. Place baby on it. Fix support band, threading it through crotch piece. Attach to loop. Lift baby and hold against your chest. Supporting baby with one hand, put top bands over your shoulders. Cross them over your back, thread them through the 'D' rings and tie them apron-style behind you. Yes, it can be done!

The baby should be 'pouched' comfortably with legs out above the bottom band. The head should be supported by the padded top band. Padding on top band should extend to make shoulder supports for the wearer and the mai-tai should be comfortable for both baby and wearer.



Back view: top straps pass through the 'D' rings and tie apron-style behind.

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ALL'S FAIR IN WAR . . .

by Barbara Munro, Korumburra, Vic.

Reading in 'Down Home on the Farm' (GR 68) of Megg's experiences of foxes has prompted me to write of a battle we had with Silas the fox. It all started when we decided to plant about 1500 trees, some for a woodlot and some for the land. The Forestry Department advised us to plant a fertiliser pellet under each tree, but they neglected to tell us that foxes love the smell of the pellets.

After all the trees were duly planted, with newspaper and sawdust around each one, two very weary sore-backed bods admired their handiwork with grinning satisfaction — then came the rain. Next day we found ten trees dug up, which started a series of events like cursing (from the male member of the establishment), replanting, bemoaning broken trees and working out who the culprit was — none other than an old fox who lives down the gully.

After a couple of days replanting, even spreading the fertiliser pellets around on top of the ground, all to no avail, the regrettable solution was war — Old Silas versus Great White Hunter and Chief Searchlight Holder.

On the first night we borrowed a gun from a neighbour and waited very quietly in the darkness. Next thing we heard a noise. I turned on the light and as Great White Hunter cocked the gun Chief Searchlight Holder screamed, 'Don't! It might be a cat!' Off went the bullet into the wide blue yonder and one bewildered fox ran off, wondering what all the cursing was about. For the next week out crept the hunters at all times of the night and, as soon as they returned to the house, out came Silas to dig up more trees. Ever had the feeling that someone is hiding in the grass laughing at you?

Next the Great White Hunter bought a fox whistle, a little round tin whistle that fits neatly in one's mouth, and when blown is supposed to sound like a rabbit in distress. At 1 a.m., out crept the hunters. Great White Hunter started to blow and blow and blow, while Chief Searchlight Holder suddenly saw the funny side of it all — with crossed legs, hand over mouth to suppress mirth, could hold on no longer, and out burst fits of giggles, totally uncontrollable. Great White Hunter also succumbed to the humour of the situation. Old Silas heard this great outburst of mirth and wondered what type of hunting it was.

Next Great White Hunter suggested that we camp out all night. Quietness was most essential, so creeping in pitch blackness, laden with blankets, searchlight, thermos and biscuits, we travelled like shadows through the night. Two hours later after waiting in complete silence I heard this very strange noise close by. With heart thumping, I turned towards Great White Hunter, searchlight poised, and there he was fast asleep, snoring as loud as he could. Again Old Silas must have wondered what type of hunting that was.

It was then suggested by neighbouring farmers that traps were the only way to catch him, so six traps, well hidden, were placed in a circle with the bait in the centre. Next morning ten trees, plus a very nice meal of rabbit supplied by Great White Hunter, had been taken by Old Silas — and not one trap touched. This game of lock up the cats at night, set traps, race down at first light with gun to put him out of pain went on for



the next few weeks, ending with two totally bewildered stay at home cats, a Great White Hunter who had run out of curse words and a whole township waiting with bated breath to see who would win the battle.

One night we were going out so neighbour decided to try and catch Old Silas himself. Next morning Great White Hunter went down to check the traps and lo and behold there in the middle was something big and furry! Two shots rang out and I suddenly felt sad — I had become attached to Old Silas. 'Hurrah!' shouted the neighbours, 'Wow!' cried the cats, 'We can go out at night again'. Up came Great White Hunter with a funny look on his face and carrying something big and furry — to wit, one very old moth-eaten kangaroo skin, neatly shot in two places! Neighbour had placed old skin in centre of traps as bait.

Great White Hunter has hung up his hunting whistle and has admitted defeat. And Old Silas has tired of digging up the trees. Often when the moon is full of light, we see Old Silas with a friend as they walk through the paddock, and I am sure he tells her 'I did battle here — and won!'



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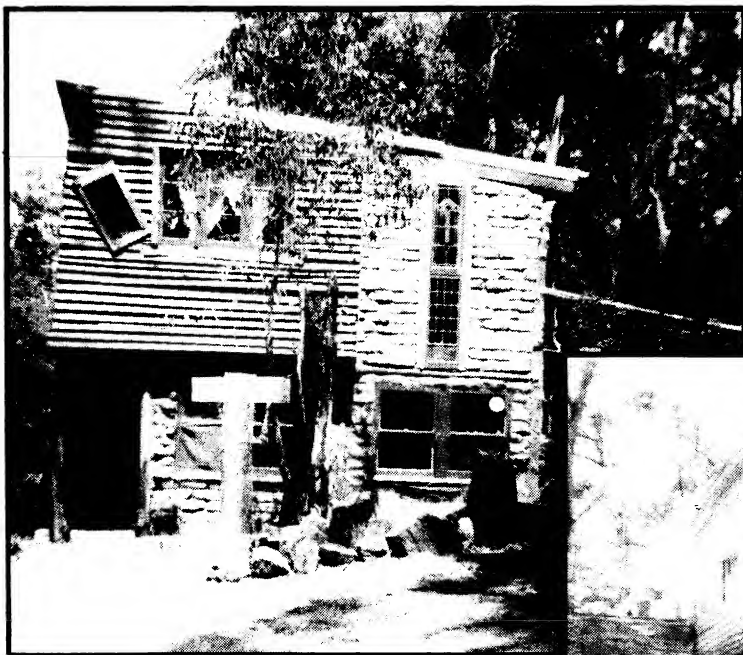
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TAPITALLEE

Last issue we featured an article on Tapitallee Retreat, a spiritual and environmental education centre tucked away on 48 ha (120 ac) of beautiful bushland several hours drive from Sydney. In it John and Sandi told the story of how they made an idealistic dream into a reality despite minimal financial resources and lots of setbacks along the way. They organised for additional photos to be taken to accompany their article but these arrived too late to meet our deadline. It seemed a shame to keep these inspiring photos to ourselves so we have included them with the hope that they will provide innovative low cost ideas for other GR reader-builders.



Nebulus cottage was our first building and was imaginatively constructed from mudbricks, bush rock and timber. We were able to buy windows and doors secondhand, other materials were either bought cheaply from small family businesses willing to negotiate on price or were recycled from friends. The major costs were concrete and sawn timber — with our finished price for the building being around \$7000.

The cottage has a share loft bedroom, rock healing room, large lounge and kitchen/dining room. The upstairs rooms provide wonderful bushland views.



The geodesic meditation dome has a 5 m (16 ft) diameter and will house around 40 people. Although time consuming to build the materials were inexpensive. We used imported shingles with glass fibre reinforcing — the most expensive material in the dome — but it has paid off as we've had no leaks.



Our second centre has been made from train carriages converted into separate bedrooms and with a 4 x 11 m (13 x 36 ft) workshop space dividing the carriages.

Steel roof trusses covered with corrugated iron cover the workshop space and unify the building as a whole. Heating in winter is provided by a hot drum — and is amazingly successful.



A third carriage — out of sight — provides a kitchen-dining room and with the large room we've attached to it can cater for up to forty people.

For more information about the retreat, contact Sandi Rutledge at Tapitallee Retreat, Illaroo Rd, Nowra 2540. Ph: 044-460-138.

GETTING THE MOST FROM OUR SEAFOOD

by Jose Robinson, Wild Cattle Island, Qld.

Seafood is one thing that we are never short of in our beachcombing lifestyle. We not only eat our fish, prawns and oysters, we also find many things to do with their skins, shells or residue.

FISH SKINS

Tanning

Some fish have skins suitable for tanning, among them are barramundi, shark and moray eel. No doubt there are other fish whose skins may also be tanned, but the above three I have successfully tanned and turned into all kinds of useful items — wallets, bags, belts, writing cases, stubby-cooler covers, slippers and moccasins.

The solution I use for tanning is a mixture of kerosene and bicarbonate of soda, mixed to a creamy consistency. This is applied to the cleaned pegged out skin twice a day for four days. Scrape off residue each time. Keep skin covered with a damp cloth to prevent drying out too quickly. Apply mix to skin once a day for the next two days. Scrape down, clean off and dry. If skin is too stiff when tanned, pull it gently backwards and forwards around a smooth round post a few times until it softens.

There are several methods of tanning, but this one is simple and works well for me. The barramundi may be tanned with or without the scales. With the huge scales removed it tans to a soft tissue-papery feel, and with the scales left on, it is a very stiff and thick hide, which is only suitable for certain things. It is rather tough to cut or shape. Moray eel skins make very smart moccasins or mules, as they have a leopard-like pattern in tans and browns.

Drying

We have constructed a special solar dryer just up from the beach where we dry all fish skins. When we are filleting smallish fish, especially whiting, we cut a fillet off each side of the whole fish, leaving the head and frame to be used as crab-pot bait. The skin is then shaved from the fillets with a long thin knife with the scales still on the skin. This eliminates the mess of scaling the fish first. The skins are then placed on a mesh rack in the solar dryer until crisp. Later this becomes minced fish-meal for the chickens.

SHELLS

Crab Shells

We never cook our crabs whole, for we feel the stomach contents contaminate the flavour of the meat. We spike the crab first to kill it instantly, cut the back shell in two, then remove the main shell and stomach contents. The shell and residue go straight into the compost bin and are covered with soil. The body is then cooked with the claws and legs intact. No mess! No waste!

Turtles

Of course turtles are totally protected and an extensive fine is imposed on anyone killing one of these beautiful creatures. We have a tremendous number of turtles in our estuary all year round, and we love to watch them glide smoothly through the water, coming up periodically for air. However, it is not uncommon for a dead turtle to be washed up on our



Jose contemplating a group of mud crabs shells that have been treated and are ready for mounting.

beach. If it is still reasonably fresh and not too smelly, we save the shell. They can be treated with oil both outside and under the shell, once the body has been removed. If the shell is kept covered in a shady place and more oil added every few days, it will eventually dry out and cure. The oil must then be removed, and a protective clear varnish brushed on to preserve it. Another way to treat the shell is to remove the body, and put lots of common salt inside the shell. This will make a brine which will eventually cure the shell. Placing the shell on a meat-ant's nest is a good way to remove small pieces of hard to get at flesh.

Mounted Mud Crabs

When we have a spare giant mud crab of perfect proportions, we carefully preserve his shell after freezing it down, by injecting formalin into each joint of the shell. This dries up any inside residue and leaves the shell completely intact. This process takes about 6 weeks, after which time the shell may be cleaned and varnished and mounted on a suitably prepared board. This makes a great conversation piece for people from southern states, where the cost of a mud crab for the table can be rather exorbitant.

Oyster Shells

Some of the huge black-lip oyster shells which we find on the beaches north of here make attractive coffee table ornaments if you can get a matching pair and glue the hinge back together. I have some that measure 120 mm (5 in) across. These huge oysters are delightful to eat if dipped in flour and fried in a little butter for half a minute.

Small Shellfish

Once the pipies, mussels or other small shellfish have been cooked and eaten, these shells can be cleaned and have holes drilled in them to be used in necklets or in macrame for hanging planters.

OTHER RESIDUES

Bones and Teeth

Good sized sharks' teeth are much sought after for necklaces.

To remove the teeth intact, the shark jaw must be boiled for several hours (definitely an outdoor job, as it is not a pleasant aroma). The teeth should then come out readily.

The tiny dried skeletons of the minute creatures we call prawn-killers make dainty and unusual ear-rings just as they are.

Poultry Feed

My chickens have grown up on seafood scraps as a supplement to their grain. They drool over prawn heads. In fact in our prawn season (that is when the prawns are available in the estuaries) from about January to March, our chickens get fed so many prawn heads (cooked) that the yolks of their eggs are bright orangy-red until the season ends.

We have discovered over the years several midden heaps in creek banks of the secluded winding waterways on the island. Some have been covered by metres of silt and are visible only in the cross section of high banks. It would appear that early tribes of Aborigines must once have enjoyed their shell-fish in the area, and used the by-products to the full, just as we do today. It's pleasing to think that we're carrying on their tradition of conserving the land's resources.



The fisherwoman with her catch, a nice salmon.

SUNBURN RELIEF

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Penny Golding.



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BATTERY CHARGER UPDATE

by Andrew Blair, Outlook Alternatives, Wangaratta, Vic.

From time to time we have customers wanting to use a car alternator or generator to charge a second battery to provide power for a small 12 volt power system. It is also a common thing for people with four-wheel drive vehicles who run a car fridge to run the fridge off a separate battery. The system is simple and works well. When we have been involved with such an installation we have always sought help from an auto electrician, to avoid some of the problems that might be encountered by your readers if they were to connect up as shown in the 'Easy Battery Charger' diagram on page 41 of GR 70.

I have outlined below the sorts of things that have to be considered but that were not mentioned in that article.

- I always like to isolate the normal car battery from the second battery so that if the second battery (used for lighting or a refrigerator) goes flat, then the car can still be started using its own battery. A relay switch that connects the second battery only when the key is turned on is one way of doing this.

- An auto electrician will help to get the cable sizes and fuses correct. Suitably sized cables will vary from one brand of vehicle to another. Cables that are too thin could melt and cause a fire. Some vehicles may not have an alternator or generator large enough to charge a second battery.

- A lot of people see this as being free electricity, and it is close to it, but the extra loading will mean that the alternator will wear out a little faster than normal and the vehicle will use slightly more fuel.

- I would be concerned at a battery being charged in the closed boot of a car. It is one thing to transport a battery in the boot of a car, but when it is being charged a battery releases hydrogen, an extremely explosive gas. Good ventilation is therefore essential.

It has been my experience that many auto electricians would give you all the advice you need if you buy the bits from them, but it is not fair to expect to get the advice and buy nothing. As I said at the beginning, if you are planning to use a second battery let a good auto electrician help you get it right — and safe. Get it right from the start, otherwise you may not have a second chance.

Outlook Alternatives specialise in the design and installation of all types of alternative energy systems — solar, wind and wood powered. 52 Faithfull St, Wangaratta 3677. Ph: 057-219-900.

DOCTORS' OPINIONS

Japanese doctors prefer traditional home remedies for treating colds rather than simply popping pills. According to a survey of 113 doctors by a Tokyo-based pharmaceutical company, the following methods were among the most popular:

- consuming large bowls of boiling noodles, with a lot of garlic, just before retiring to bed;
- drowning one's sorrows in the popular rice wine, sake;
- gargling and sleeping with a towel around the throat.

Asked why they did this, the doctors said there was no known drug which was effective against cold viruses — and the home remedies worked!

Reprinted from *The Sage*, Vol 11, No 3, March 87, newsletter of Qld Herb Society, PO Box 209, Paddington 4065.

Terrace Farming

by Axel Bosselmann, New Norfolk, Tas.

We know very little about the origins of terrace farming. There are many experienced terrace builders in several parts of the world who cannot read or write let alone understand or draw up the complicated designs necessary.

The Nagas and Mizos of Eastern India who are highly educated people nowadays will tell you that not all soils are suitable; some are so prone to erode that they are best left under forest cover which, of course, no longer exists in much of Asia, is on its way out in Australia and threatened in the Pacific Basin. Hence the interest in terraces which minimise erosion and permit intensive use of existing hillside land.

Terraces were adopted by people who had no more land to spare and who had nowhere else to go, the lower reaches having been settled by invaders or by the richer and more powerful. In Africa, terracing has been an aberration; among the few instances are Mount Cameron in the west and Rwanda in the east. Until recently, that enormous pressure on land which is common elsewhere had not existed in Africa. Middle Eastern desert farming is an ancient form of dry farming, all but dead and only now being revived. It employed terraces to utilise and conserve uphill moisture such as mist, heavy dew, the odd rain, snow and a stream or spring if available. Terraces still exist in Yemen and may have originated from the Hanging Gardens of Babylon.

In crowded Asia with its ancient civilisations, people such as the Kalingas in the Philippines or the Lushai-Mizos of India had taken to terracing hills and had become highly sedentary; too much so for those in present day India or the Philippines who now covet the slopes for their mineral wealth or their hydroelectric potential. Terraces also supported the Incas of Peru and spread even beyond the various Mongolian, Indian and Chinese empires of old, from Western Tibet and the Caucasus to Java and Japan.

CONSTRUCTION

The people who adopted terracing had at one stage or other been influenced by some architecturally advanced civilisation. This is no coincidence; for as there are similarities between a step and a terrace, laying out a terrace involves skills akin to those of a master builder. One has to look out for three things: stepping, bunding, draining.

Stepping

A step (see figure 1) is a block with a drop, an upper surface and a side all of which are at right angles to each other and are matched by corresponding areas hidden in masonry or in the ground. These blocks are then placed along the real or assumed ground level (their continued lateral diagonal).

Terraces are like steps cut out of the hillside rather than set into it. The lateral view is then into the bedrock or against the wall of another terrace, a step as it were belonging to a different staircase. The drop at the hillside end of the terrace is bedrock as well and supports the upper ones.

The working area is the upper surface and is ideally flat, with a slight slope away from the rim or bundh (see below).

It is not usually safe to superimpose or set onto a hill face a new terrace and it would require additional soil from

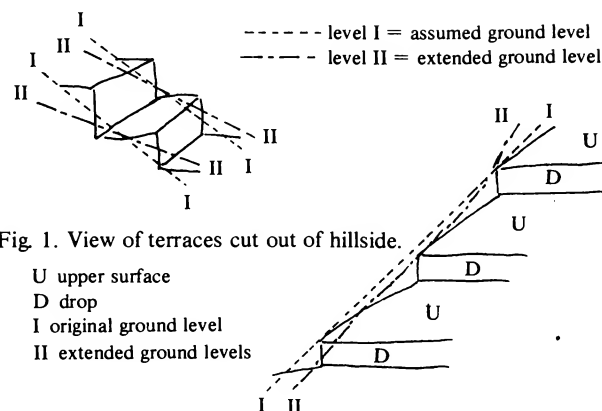


Fig. 1. View of terraces cut out of hillside.

Note: the extended level helps explain why terraces do, in fact, increase the workable hill surface.

elsewhere. As a consequence, part of a terrace is cut out of the hill and matched by an equal amount added in front, facing the valley; this is not infrequent and needs at least some built-up support other than rock.

Bunding

Bundh is an Indian word meaning boundary. Throughout much of Asia and in medieval Western and Southern Europe this was a ridge or wall rather than a ditch or drain, as had been the case in Central and Northern Europe.

Bundhs are made from tufts of grass, fern or peat, clay, mudbricks, stones or several of these. They are necessary to protect the boundaries from spillage, erosion or damage while the plot is being worked. If the bundh showing towards the valley is lower than the hill end of the terrace, then there is the risk of snow, water, sand or gravel pushing against and over it, ultimately ruining the terrace.

Draining

A slight slope into the hill or sideways facilitates drainage but may make irrigation somewhat more difficult. Seasonal excesses of moisture are common to many hill areas. These must not be permitted to accumulate on terraces and cause them to erode or become waterlogged and saline, or encourage carriers of animal and human diseases to breed there.

On traditional terraces, irrigation and drainage points are usually identical which permits the drainage from above to be used to water the terrace below. With the superimposed terraces, it is the hillside corners which form these points; on those cut out of the hill, the ones pointing to the valley are used. A Malayan system uses bamboo pipes which can be laid at will and which tend to utilise the extended ground level (see figure 2).

TERRACES IN AUSTRALIA

Sprinkler irrigation has reduced the need for drainage and has made watering accurate and flexible which should minimise erosion, salinity and waterlogging. Modern building materials have taken the drudgery out of setting up terraces with pinpoint accuracy. The rototiller, originally developed for terraces in Japan and China, can be used profitably (and

enjoyably) on all but the most awkward ones, as vintners in Central Europe found out. Terraces need not be an obstacle to wheeled transport anymore but can be worked like almost any other farm or garden.

This modern and, to Australia, entirely appropriate technology may yet motivate people here to increased use of terraces. The old Chinese market gardens built in Australia late last century were the inherited response of a people made marginal; they were often terraced. Many towns and suburbs have since spread over quite hilly terrain. Owners have already, as a result, terraced parts of their plots to make them look nicer or to protect and make better use of a slope.

Land is at a premium these days and water supplies can be limited, even in or near cities, and these two factors are among the traditional causes for terraces to be built. These may well evolve as a way to lay out a city garden or farm, to make better use of and protect a suburban hill and to effect an increase in the market value of a property. Recent severe bushfires have brought home the need for effective fire control along the edges of wooded hills, and terraces are one of the most accessible and useful firebreaks.

Over millennia, terraces evolved as an ingenious and lasting form of fringe farming and have a place in or around the cities and suburbs of Australia and on much of the land previously considered marginal. Modern, scaled-down technology can aid us greatly there in ways that big industry, big business and big government cannot and will not.

.....
God gives every bird its food, but does not throw it into the nest.

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THE BUILDING DEVELOPMENT CENTRE

With the high cost of labour and the wealth of information available to the homeowner, it is not surprising that more and more people are turning their hand to home improvement projects. Add to this the satisfaction of doing it yourself and enjoying the fruits of your labour, to say nothing of saving some money, then there are plenty of reasons for having a go!

However, a word of warning: be sure of your own competence, evaluate the project carefully and do not take on something that is beyond your capabilities. Make sure you read and understand instructions. Remember, there is no easy way — do not take short cuts if you want a quality, durable job. The important thing to do is get the right sort of advice — advice that is not only correct, but also totally unbiased. The Building Development Centre in East Melbourne is the place where you will find the widest range of building fittings, materials and products in Victoria. There are three floors comprising approximately 230 displays with hundreds of products on all aspects of building, renovating, restoring and general home updating, with free brochure and information service to back them up. Open seven days a week this free, permanent exhibition and advisory centre allows visitors to inspect the modern trends in the building, renovating and equipping of a home.

One of the most important aspects of the Centre is the accumulated expertise to be found at the enquiry counter which has a reference file of thousands of products and materials; this is available to professionals, tradespeople and the general public who contact the Centre to locate the manufacturer or distributor of a certain material. The staff are qualified through practical experience in the trade to give advice on all aspects of building materials and their application.

The Centre has for sale a wide range of industry documents such as contracts and specifications, plus semi-technical and technical publications from *Designing a Kitchen*, *Designing a Bathroom*, *Noise Control*, *Security*, and *Earth Wall Construction*, through to the *Timber Framing Manual*, *Victorian Building Regulations* and an *Owner Builder Manual*, to name but a few. The latest publications are entitled *Sub-contracting for the Owner Builder* and *The New Winners*.

The latest service to be offered is a house inspection, whereby an independent authority will, for a fee, inspect a house for the intending buyer prior to purchase to ensure its soundness. Another service covers the inspection of a house for problem solving such as cracks in walls, dampness and disputes, with examination of drawings/plans and specifications for advice and/or assistance. The service is unlimited whether it be for a small domestic renovation or a multi-storey project. The Centre fulfills its role as the only free, unbiased advisory centre in Victoria.

The Centre is located at 332 Albert St, East Melbourne 3002 and is open seven days a week.

From *Focus On Building*, publication of the Building Development Display Centre, August/September 1988.

ANOTHER ITCHY DOG STORY

by Lesley Kirby, Richmond, NSW.

After the response I received to a letter I had published in 'Feedback' (GR 64, p. 4) I decided to write and share the help and advice I was given with any other folk who may be interested in the same problem.

To quickly recap for those who didn't see my original letter, I have a three year old Rottweiler dog called Ben who has suffered from a skin complaint since the age of six months. This complaint began as patches of hair loss and small areas of damp matted hair, and with the aid of persistent scratching soon progressed into bald patches and oozing sores. These symptoms first appeared around the tail and hind legs and spread at an alarming rate to all parts of the body. Along with the physical signs Ben became listless and lethargic and his general health was not up to scratch.

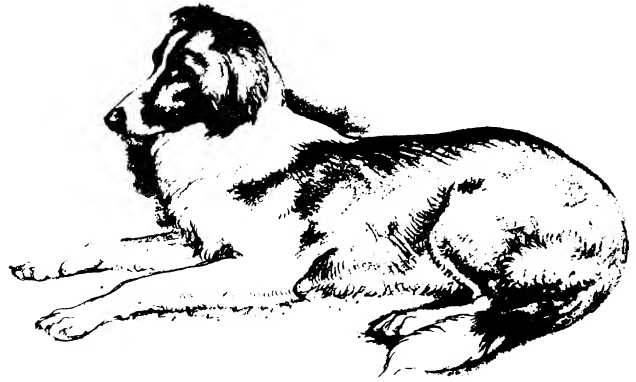
At first sign of the problem I made a visit to the vet and came away a little disillusioned to say the least — the diagnosis was coat shedding! To cut a long story short, over the next eighteen months the vet visits followed each new symptom, the list of supposed causes grew longer, the vet cabinet at home grew fuller and my purse grew decidedly thinner. Among the causes I was given were coat shedding, puppy acne, nervous tension, wandering Jew allergy, shampoo allergy, flea allergy, etc, etc. Each vet visit armed me with a new collection of pills, potions, creams, lotions and general cure alls, none of which worked.

Finally I gave up and decided to try a few home remedies which gave relief but didn't stop the symptoms. All through this Ben had been fed a diet of fresh meat, dry dog food and table scraps, as had our other dogs. I decided to try a new diet and see what happened. At this time I managed to obtain a copy of Juliette de Bairacli Levy's book *The Complete Herbal Handbook for Farm and Stable* — what a breakthrough! I followed Juliette's treatment for eczema and within two weeks the symptoms had eased and in two months they had disappeared completely. Ben still has minor outbreaks from time to time but only small patches which are soon under control and which don't trouble him.

The basis of the treatment is a complete whole food diet, no processed foods at all — a theory that was reaffirmed by articles by both Bert Luchjenbroers and Suzy Whymark in a recent *Grass Roots* issue (GR 66 p. 24). I am still unsure as to whether it is an allergy to the colourings, preservatives or what but after a few experiments I've found that if I revert to any processed food the problem reappears and is only controlled by a return to the natural diet. I have included a few lines from the book and some of the recipes I received from other readers for dog biscuits. I've found that strict flea control and the new diet have changed Ben into a new dog. I'd just like to add my thanks to all those readers who took the time to write to me with help, advice or just concern.

MANGE

This is a severe parasitical disease which occurs in two forms, sarcoptic and follicular. The two kinds of mange parasites are small louse type mites and are invisible to the naked eye. They burrow beneath the skin and increase with great rapidity. Cases of follicular mange often look as if they have



been sprayed all over with buckshot, so numerous are the skin eruptions, the skin turns elephant grey, hair falls out and a mousey smell becomes evident. Sarcoptic mange, in addition, produces inflammation of the skin and intense irritation.

Grease and ointments are detrimental in the treatment of parasitical skin ailments for their use protects the mites and provides them with food.

Treatment

Lemon peel lotion — place used lemon halves in sunlight, add hot water and leave until mouldy, squeeze well and remove then add more fresh halves. Add juice of two lemons to each quart. Mix one part vinegar to two parts lemon water, rub well into all parts of the body. Repeat.

ECZEMA

This is nature's way of ridding the body of toxins. The symptoms are inflamed and discharging areas of skin, especially down the back and around the tail. The animal rubs against hard objects, body is irritated, discharging matted areas form and there is considerable hair loss.

Treatment

Diet should include no manufactured foods as some animals are very sensitive to artificial colourings and other additives (this causes eczema). Fast for 24 hours, giving honey and water only, then feed cereal (oatmeal, maize meal, etc). Give raw meat — raw bones after meal — and include 4 garlic tablets per day and 2 tablespoons of watercress or parsley. Raw eggs or whole milk can substitute for raw meat. If you can find stinging nettles, boil them up and give 2 tablespoons of the liquid per day. Externally, use no ointments. The liquid from boiling blackberry leaves or witch hazel or raw cucumber juice can be applied to the skin as required.

DOG BISCUIT RECIPES

Judi Cetel's Doggie Biscuits

- 3½ cups plain flour
- 2 cups wholemeal flour
- 1 cup rye flour
- 2 cups bulgur (cracked) wheat
- 1 cup cornmeal
- ½ cup nonfat dried milk
- 4 tsps salt

- 1 sachet of active dry yeast
- ¼ cup warm water
- 2 or 3 cups chicken broth (can use tin or cubes)

Combine flours, wheat, cornmeal and dried milk. Mix yeast, salt, warm water and 2 cups soup. Add to dry ingredients, add more liquid if mix is too stiff. Heat oven to 150°C (300°F). On floured surface, roll dough to 6 mm (¼ in) thick and cut into squares, place on an ungreased tray and brush lightly with egg. Bake 45 min then turn oven off and leave in oven overnight.

Basic Dog Biscuits

This recipe came from the South Australian Animal Welfare League magazine.

- 2 parts pollard
- 1 part bran
- ¼ part oatmeal
- ¼ part soya bean or wholemeal flour
- 1 lump polyunsaturated margarine (approx. 1 tbsp — more if making a large quantity)
- 1 pinch salt
- 1 beef cube
- sour milk and water

Combine all ingredients and mix well until about the consistency of scone dough. Roll out and cut into squares and cook in a slow oven until dry, this drying is a long process.

Quick Dog Biscuits

This is a simple one from *Here's Health* magazine.

Cut slices of good wholemeal bread to 2.5 x 2.5 x 5 cm (1 x 1 x 2 in) slices, place in the oven till dry and golden brown. Must be done in a slow oven.

Hard Dog Biscuits No. 1

- 60 g (2 oz) shortening
- 1 small tin meat or fish paste
- 120 g (4 oz) plain flour
- 1 tbsp gravy mix (optional)
- a little milk to mix

Cream shortening and meat or fish paste. Add dry ingredients and mix to a firm dough with a little milk. Roll in balls and press flat with a fork on to the baking tray. Bake biscuits at 160°C (325°F) for 15 to 20 minutes. Remove from the oven and cool, then place the biscuits back in the oven at the same temperature for 5 to 6 minutes. When cold the biscuits should be hard.

Hard Dog Biscuits No. 2

- 500 g (1 lb) bran
- 500 g (1 lb) pollard
- 250 g (8 oz) meat meal
- 1 tsp salt
- 1 cup powdered milk
- 360 g (12 oz) grated suet or dripping
- warm water

Using a knife, mix dry ingredients with powdered milk dissolved in warm water until you have a stiff paste. Press into a well-greased baking dish, mark deeply the shape and size you require. Bake in a slow oven.

SPCA Biscuits

- 285 g (10 oz) mash made from bran and pollard
- 225 g (8 oz) melted dripping
- 225 g (8 oz) grated carrot

- 450 g (1 lb) wholemeal flour
- 225 g (8 oz) liver (minced)
- approx. 300 ml (½ pt) water

Combine all ingredients. Grease a baking tray and spread with mixture approx. 6 mm (¼ in) thick. Mark into squares and bake at 200°C (400°F) for about 1 hour then turn over and cook at 150°C (300°F) for a while longer until they dry out. Break up into squares and dry out again and store in a dry place to prevent them from softening.

Pet Loaf

- ½ cup wheat germ
- 1 cup rice bran or wheat bran
- 250-500 g (½-1 lb) mince
- ¼ cabbage
- chopped vegetable peelings, or grated carrot cooked until soft
- 1 cup crushed barley (also known as rolled barley)
- 2 cups water

Boil barley in water. Add all other ingredients, let mixture cool and press into an icecream container. Keep in the fridge. Mince may be reduced in steps by gradually replacing with ½ cup soy flour per equivalent mince until ultimately no mince is used. Pet loaf is liked by cats as well as dogs and is recommended for dogs with an itchy skin condition which is not necessarily eczema.

MELON SEED

Did you know that fresh watermelon seed can be planted with excellent results? Just eat the fleshy part and plant the seeds directly into the garden without drying them out.

Penny Golding.

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Innovative Homemaking

Making Use of Cheapies and Freebies

by Anne Mayne, Newport, NSW.



This beautiful stained glass window in our new sunroom was picked up during a council clean-up.

When I gaze around our comfortable country home, it is with satisfaction that I peep through Sue's old kitchen window, open Terry's discarded glass doors and feel the carpet underfoot salvaged from the tip. Five years ago, the house on the property we bought at Mudjee was four bare rooms and unlined. We virtually rebuilt the house, from the inside out and then the outside in, adding two porches, a big sunroom and a bathroom. With limited funds we completed most of the work ourselves. In order to save as much money as possible, we looked for inexpensive or free building materials wherever we could.

Our friends and relatives proved to be our greatest sources for materials and often they were glad to have the items removed. We were able to obtain free or very inexpensive windows, doors, kitchen cupboards, sinks, cabinets, items of furniture and building materials. My husband Phillip approached our neighbour Graham who was demolishing an old house in order to erect a new one. In return for Phillip's help, Graham was very generous in giving us a lot of timber frames from his house for our extensions. We also purchased cheaply from him a toilet cistern, a copper hot water tank and some french doors for our new sunroom. Graham also offered us a garage which we reluctantly turned down.

Until recently we have been able to obtain numerous items from the local tip, and Phillip's favourite hobby was to scrounge around in it for all kinds of treasures. The items he has found there have been useful and it is a pity to think many

things are covered up which people may have a use for, especially household items still in good repair and usable building materials. Although some tips do not allow scavenging, others have a licensed scavenger who will sell items inexpensively, so it is worthwhile investigating.

As our property has several sheds, we have been able to store items which we have no immediate use for, and either swap or sell unwanted articles. In great demand we have found are cupboards, screen doors, windows and doors. We have been able to purchase second hand materials such as roofing, and other items which are imperfect or 'seconds' from salvage yards. A check of newspapers will yield various bargains for sale from time to time. We have picked up a lot of our furniture and furnishings at garage sales or clearing sales — it is a matter of watching the newspapers, or if you are out for a drive, stopping to have a quick look at what is available. Most people at garage sales will accept a reasonable offer just to be rid of the item.

To give you an idea of what we have been able to obtain for our home in the country, the following is a rundown of our 'freebies' and 'cheapies':

- Outside — concrete laundry tubs serving as my laundry, hand operated wringer from a garage sale, two rotary clothes lines from neighbours, a wheelbarrow from the tip, and numerous windows, doors, screen doors and cupboards in storage in sheds, mostly from the tip. White shutters for the



We paid \$16,000 for a four roomed unlined house on 30 acres seven years ago. With ingenuity, some freebies and cheapies and lots of work we have enlarged the house and fitted it out to be an attractive comfortable home.

house windows came from Judy, recycled netting is used for tree guards, bush rock from our property forms garden edging and rockeries, timber cut from property used to build sheds, with second hand corrugated iron for shed walls and roof. Unwanted stone from the local quarry (12 trailer loads) was with the owner's permission used to fill our driveway. *

- Living Room — sofa and chairs from my mother, rug from my aunt, table from my brother, sideboard left to Phillip in his aunt's will, mirror from a garage sale.

- Bedrooms — bed from a garage sale, bedroom suite in pine from my boss, wardrobe from my brother (it fell off the back of the trailer, but miraculously the mirrored doors were not broken), chest of drawers from my brother, dresser and mirror I had as a child, carpets from the tip in two rooms, rug from an aunt, silk flower samples from Bruce, massed in vases and jugs also found at the tip.

- Kitchen — kitchen cupboards repainted in blue from my mother after a kitchen renovation, with the benchtops tiled with end of the line tiles, table from the tip, four mismatched chairs all freshened up with white paint from the tip, sideboard and sink from Stanley, rug from an off-cut, numerous kitchen items from the tip or friends and relatives, pantry doors from Margo, two glass doors from Terry, kitchen window and two wooden stools from Sue, curtains from my mother.

- Bathroom — bath from the tip, all tiles were end of line specials, laundry tub from Stanley, cupboard from Sue, toilet cistern from demolition of Graham's house, mirror from the tip, bathroom cupboard from the tip, window from Terry.

- New sunroom and porch — most building materials were free from demolition and roofing was from salvage yard in good condition. French doors from demolition, screen doors from my mother, set of windows left in a shed on the property which matched others in the house, stained glass windows from Fiona who picked them up for me in her local council cleanup (they are stunning), glass door from Cecilie, carpet from the tip and a rug from Sue. Furniture all bought at garage

sales or through friends.

We still have enough items and timber in reserve to close in our back verandah which we hope to complete shortly. In the meantime, we intend screening it with shade cloth we were given. We even have a large quantity of heavy duty netting from a tennis court we pulled down — this has been excellent for strong tree guards outside our house yard and we will use it to refence our chicken run, as it is much stronger than regular chicken wire.

The numerous laundry tubs we have acquired are set out in paddocks and yards as troughs for water and feed. Free timber pallets from building sites have been useful to keep items such as timber, firewood, and hay off floors in sheds. We were also able to obtain a large number of big green McDonald's pickles buckets which we have used constantly once we rid them of the dreadful pickle smell. (The horses turned up their noses in disgust initially.) We set the buckets out to collect rainwater for the garden, use them for weeding and carrying rocks, collecting kindling for firewood, for horsefeed and so on.

We continue to obtain various items which are useful — old Victa lawnmowers for parts, items of furniture, and recently we were again offered a big garage by another neighbour. Great argument ensued as I felt we do not have enough time to demolish, transport and rebuild it (Phillip is finally speaking to me again). Nearly forgot to mention the best bargain of all — an old Holden ute in good condition, which Phillip got in exchange for three bottles of Scotch!

My mother's colourful patchwork quilts, my hand quilted cushions and paintings, jugs of pretty silk and dried flowers, leaves and grains, together with home made curtains and inexpensive wall coverings, have made our home 'Braemarnie' a delightful 'countrified' retreat. Our grateful thanks go to the many friends and relatives who have taken such an interest in our project, without whose generosity we would never have been able to put together all the many little touches that make a house a home.

Recycling Worn Out Towels

by Elsie Hoare, Berwick, Vic.

They really are past it and I should throw them out of course, but I'm so tight fisted that I never let anything slip through my fingers if I can possibly find another use for it. I'm talking about my old towels. They're barely good for one dry, and then only if you happen to be no more than about a metre tall. They take up valuable cupboard space, yet still I mulishly hang on to them.

So. What to do with an old towel? Of course the obvious comes to mind immediately. Folded several times it will serve as a bath mat, a kneeling pad for 'hands and knees' jobs, a 'wiper up' of spills, or something cuddly for the dog's basket.

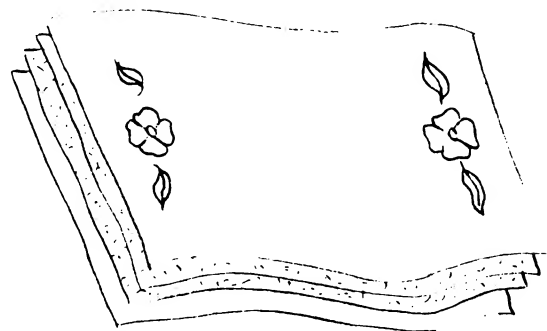
If I cut out the good bits and bind them I would have some new face washers. If I add a loop for hanging, I could thread one onto the waist tie of my apron. Then I'd always have something handy to dry my hands. Better still, if I gathered some of the larger pieces onto a waist band and added ties, I could have some very useful aprons. Great for drying hands, small faces, or holding squirming little bodies at bath time.

Smaller thinner pieces could be used sandwiched in between bright coloured cotton to make pot holders, tea pot covers or oven mitts. As a lining for patchwork quilts, an old towel (or several) would be very good, warm because the loop pile would trap and hold the warm air like a cellular blanket, yet lightweight and non-allergenic for those who can't tolerate wool. Cut to fit a baby's neck, a good piece would make a decent bib or feeder — bound with bright coloured binding it would look quite cheerful, or what about using a bigger piece to make a pop-over apron for a grubby toddler, or perhaps a pair of training panties.

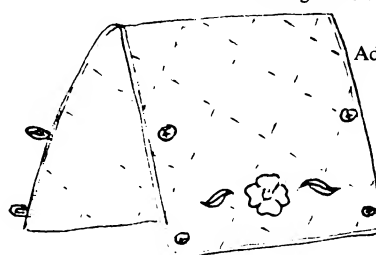
Then there's a dusting mitt. If I just trace around my hand and allow about 3 cm for easy fit, I could use that as a pattern. Cut out two pieces the same, seam them together and I'd have less trouble getting into those awkward places on the bookshelves and handling those time consuming little ornaments.

I could keep a small piece of towelling in the glove box of the car to dry the condensation from the windscreen on Melbourne's chilly mornings. What about a hot water bottle cover, or hot brick wrapper? I'm sure I'll think of something to use my old towels for. Perhaps I won't throw them away just yet.

Simple tea cosy

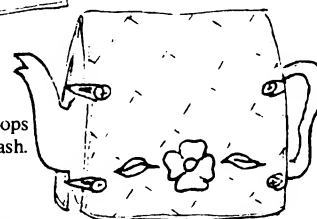


Sandwich layers of towelling between attractive outer layers, bind edges and run a few lines of quilting across.



Add buttons and loops of matching binding or elastic, or ties of matching ribbon.

Slip it over teapot. Buttons and loops make it easy to wash.



GROWING WHEATGRASS

Spread earth 3 cm (1 ½ in) deep in a container and thoroughly wet it. Spread the surface of the earth with wheat which has been soaked for 12 hours (approximately ⅓ cup of wheat for every 0.1 m²/1ft² of earth). Kernels should touch. Cover wheat with 6 mm (¼ in) of fine soil. Put a wet towel over the top of the soil and keep it moist. After three days remove the towel and sprinkle the earth gently with water. Keep the earth moist until you cut the grass.

The best environment for growth is a warm, light room, away from direct sunlight. Seven days from planting time the wheat will be about 10 cm (4 in) high. Cut and use when 10-18 cm (4-7 in) high. Harvest the crop by cutting close to the soil with scissors. Grind the grass in a meat grinder. Drink 60 ml (2 oz) of the juice daily, or use the finely chopped grass in a soup.

After the harvest break up the sod and allow it to disintegrate in a clean garbage can. It can be used for future plantings. The decayed roots may be used as organic fertiliser.

Reprinted from the newsletter of Canberra Organic Growers Society, PO Box 347, Dickson 2602.

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SAUERKRAUT

by Yvonne Swindell, WA.

Sauerkraut is believed by many people to be one of the foods most beneficial to man, because it creates conditions within the body for better health. It is also a valuable method of storing vegetables.

HEALTH BENEFITS

Sauerkraut helps stimulate the growth of friendly intestinal bacteria because of its fibre or cellulose content and lactic acid fermentation. These all-important bacteria can synthesise all the B group vitamins if there are enough of them to overcome harmful bacteria which multiply in an alkaline, toxic, overloaded colon. The friendly bacteria, aided by good nutrition with adequate fibre for elimination, create an acid medium which is ideal for the colon — 125 g (4 oz) of sauerkraut daily is recommended. Other beneficial fermented foods are yoghurt, cottage cheese, whey, sprouted nuts, sunflower seeds and sprouted and fermented cereals.

VEGETABLE STORAGE

Sauerkraut is an age old method of keeping vegies, in which they are themselves enriched with vitamins and enzymes by a similar method of fermentation to the one we endeavour to achieve in our compost making. For the best fermenting process a 2.3 lt (½ gal) utensil is the minimum size. The pot may be of glass, which is exciting to fill and to watch during the fermentation stages. Alternatively use an earthenware crockpot, tall with straightish sides and an opening big enough to take one's fist (for ramming down the contents as it is filled). Pots with a hard salt glaze are recommended.

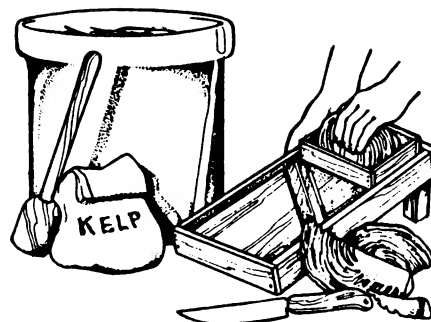
Recipe

- 1.4 kg (3 lb) cabbage (minimum — more is good)
- 450 g (1 lb) carrots
- 450 g (1 lb) beetroot
- 6 large onions
- 50 g (2 oz) garlic
- 1 large handful of mixed fresh herbs
- 2 level tbsp each of caraway, celery and dill or fennel seeds
- 2 level tbsp of kelp powder

Apart from the cabbage, make use of any small vegies you have from this list: cauliflower, broccoli, turnips, parsnips, potatoes, pumpkin, red capsicums, chopped celery, one large red tomato. Avoid peas, dried beans or lentils, although a few green beans are all right. Herbs can include comfrey, marjoram, mint, thyme, parsley and basil. The seeds aid fermentation.

Grate most of the cabbage with the finest and second finest graters. Gather up all the small ungrated pieces and put through either an old fashioned mincer or a juice extractor, adding both pulp and juice. This is to bruise some cabbage, and to make its juices flow. The vegies must be grated finely and celery, capsicum etc chopped up. The garlic and onions and herbs are chopped finely. The seeds can be used whole or pulverised. Keep all your different vegies in separate containers or heaps; the herbs and seeds should also be separated (ice cream containers are good).

Pack the cabbage first in the jar 3.5-5 cm (1½-2 in) deep.



Add vegies alternately in layers to about 7 cm (3 in). Add 1 tsp of seeds and kelp, then another layer of cabbage. Pack all this down with your fist until the juices flow and exclude all the air bubbles. Continue in layers until the vegies are within 7-10 cm (3-4 in) of the top ending with a 5 cm (2 in) layer of cabbage. Pack it down well and put in a final layer of seed and kelp. Pack 3 outside leaves of cabbage over the top of the kraut then place a clean saucer on top. Put some sort of weight on the saucer e.g. smooth scrubbed seastone or glass jar, and cover the jar with a large paper bag or towel. If you fill your jar too full the fermenting juices will rise and bubble over, in which case a glass or china bowl should be placed under the crock to catch the juice, which can be returned to the jar.

The temperature should be between 15-26°C (60-78°F) for the first 7 days while the main fermenting process is strongest — in cool weather it may last up to 10 days. The kraut will be ready when it smells ripe and good. Pot it up into small jars and refrigerate after 10-20 days of fermenting in the main pot — or put the pot in the refrigerator until you are ready to bottle it. Kraut has been kept bottled for four years in a fridge and it continues to mature.

Reprinted with permission from the Sept 1984 newsletter of the Organic Growers Association of WA, PO Box 213, Wembley 6014.

SEED GERMINATION

If you are having disappointing results with poor seed germination, seeds can be sprouted prior to being planted. One must be careful when planting not to damage the sprout, but this can ensure 100 percent germination.

Penny Golding

264 Swansea Road, Lilydale, 3140
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Livestock Health and Management

Information You Need but Haven't Known Where to Ask

If you have queries on any type of livestock send them in and we'll get our panel of experts to research the problem for you. Send them in to Livestock Advice Page, Grass Roots, PO Box 764, Shepparton 3630.

We badly need some advice on chooks. Our problem began when we bought some point-of-lay chooks. One hen (we had no rooster at the time) continually pecked the others so badly they became almost featherless (no they are not moulting). One was so badly pecked it died. The aggressive chook was much larger than the others and rarely laid an egg. We recently obtained a rooster hoping this would solve our problem but he was attacked the same day he arrived and ended up with blood streaming down his neck. The rogue chook was immediately dispatched to the great egg farm in the sky so we hope our worries are now over. Could anyone explain why this happened in case we have the same problem again? Our chooks are well cared for, have laying mash, shellgrit, green pick and vegie scraps and have a large run.

**Patrick, Sue & Joshua Gulnan
Lot 27 Komraus Crt
MORAYFIELD 4506.**

Before discussing your hen's antisocial behaviour we should explain a little about the social organisation of fowl. Behavioural problems in a flock revolve around the pecking order, in which the most dominant hen exercises her right to peck all others of a lower rank, then the next most dominant does the same, right down through the flock to the least dominant bird, which is pecked by all. If you remove this one from the group the bird ranked directly above her will become the most pecked. This social organisation begins to develop whilst they are chickens — between 6-8 weeks in males, 10-12 in females — and becomes fully implemented at maturity. With hens, once maturity is reached and they are laying, much of the physically threatening behaviour is reduced and control occurs through vocal expression and posture stance. Males on the other hand become more physically aggressive to members of their sex as they mature. Roosters are dominant over hens in the social organisation and generally don't peck or join in their power games. Their presence in a flock usually reduces hen pecking.

Your problem hen obviously enjoyed a dominant social position before you purchased her and was able to maintain it in your flock. Her large size indicates continual access to food — those lower in the social ranking are always small because they are continually hunted from feeders. The power this hen was able to wield would have been supported by a system in which fowl are kept in a shed with attached yard — there is virtually nowhere to go to escape from such a bully and so featherpicking and eventually cannibalism would become inevitable. The latter two vices are bad habits which usually begin at the grower stage when birds are intensively kept and bored — such habits are very hard to break and can be learnt in turn by the other members of the flock. A hen like yours could only be kept successfully on free range where there is too much to do to hang around bullying, and where there is space and foliage covering for the victims to hide in. Getting rid of the offending bird is the only answer in a shed/yard management system. The most likely reason she was a poor layer was that she hogged the food continually and would have become overfat — such birds do not lay well. The beaten rooster would

have been unused to the idea of being attacked by a hen and probably didn't retaliate fully, which he may well have done in subsequent altercations. Your chances of this problem occurring again are minimal, though earlier introduction of a rooster to the flock would be a wise precautionary measure.

We have a cat to keep the mice down around the sheds and as he's a friendly fellow, he often comes into the house. He has started dry retching on occasions and once brought up matter that seemed to be mainly hair. He's definitely not a sick cat — his coat is shining and he looks terrific — but why is he vomiting like this?

**Jeff & Clare Burden
WEST WYALONG 2671.**

As cats groom themselves, loose hairs collect on the barbs of the tongue and are swallowed; if a large amount of hair builds up in the stomach the cat will try to vomit it up to get rid of it, though normally small amounts of hair will be eliminated in the faeces. When more than small amounts are present there is a risk that some of the hair masses will be caught up in the corners of the intestinal tract, causing a blockage. Cats shed hair excessively for many reasons — dry artificial heat in winter, stress, too much dry food in the diet and seasonal moulting can all cause cats to have extra hair to groom.

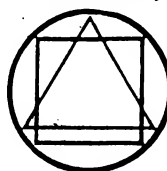
The cure for this problem is very simple and, fortunately for the cat, can be a treat. The hair must be lubricated in the stomach so that it can be passed through the body. White petroleum jelly can be fed to the cat who may need to be persuaded by smearing the jelly on the paws and mouth. Some people have used vegetable oil successfully — a teaspoonful added to the meal each day until the hairball is passed is adequate. The most popular cure as far as cats are concerned is fish, such as sardines or tuna, in oil. Feed the cat the whole contents of the tin and the oil will be enough to lubricate the hairball which should then pass easily through the body.

Prevention is better than cure, and in the case of hairballs very easy. Your cat should be groomed regularly with a soft brush, and with a little practice this will only take you one minute a day. Most cats enjoy being groomed, especially if they are stretched out on your lap and being petted at the same time. Owners of long haired cats often administer regular doses of vegetable oil in the feed — 1 teaspoonful a week for each cat. This eliminates any hairballs that are forming before they become a problem.

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YOUR HOME AND BUSHFIRES

People living in rural areas or 'bushland' areas on the fringes of large cities should be constantly aware of the dangers of bushfires. Too many lives and homes are lost in bushfires because people needlessly leave their homes or do not take a few simple precautions.

Rural families face the threat of bushfires every summer but are not always prepared for them. Preparation means having ready a plan of action that will best ensure the safety of your family and home. The suddenness of bushfires can quickly spell disaster for those who have given safety little thought.

Family discussions should be held before each summer to prepare family members for the fire hazards of the coming season. In some areas, the yearly difference in grass quantities could significantly alter the fire danger and also the necessary action. Similarly, there may be different requirements for fires starting close by and those coming from a distance. Whatever the condition, the following subjects should be discussed.

PLANS FOR FAMILY SAFETY

Safe areas

- Are the house and its surrounds sufficiently well protected to withstand a bushfire? If not, what can be done to improve them?
- Is there a safe area close to the house such as irrigated land or fallow, dams or a fireproof building in which the family could seek shelter if suddenly endangered?
- Are there more distant safe areas such as a township or recreation centre that would provide shelter away from the fire zone?

Family

When contemplating staying at home, adults must be prepared to cope with the physical and mental strains imposed by a bushfire. Any collapse or panic while surrounded by fire could cause disaster. Young children, invalids or elderly persons increase the physical requirements in an emergency. Also, they are more likely to be affected by severe heat and smoke, so consideration should be given to the advisability of moving them to a safe place for the duration of the period of peak fire danger.

Safe Evacuation

The family decision may be to evacuate, but what happens on the day will be influenced by the closeness of the fire. It should be decided beforehand how close the fire can come before evacuation is too dangerous. The availability and condition of a suitable vehicle will influence any decision to seek shelter away from the property. An unreliable vehicle may break down and trap its occupants in the fire.

Departure should not be delayed if a fire is threatening, but it is important to prepare the family for the journey. Dress the family in clothing providing maximum skin coverage. Shorts for example give little protection against radiant heat. Check that the vehicle has sufficient fuel to safely reach your destination. Collect food, water and blankets and stow in the car. Blankets should be used to shield the body if the fire overtakes the car. Close all house doors and windows. When ready, check the position of the fire and, if it has not reached the point where evacuation would be dangerous, travel directly to the selected safe area.

If the fire is too close, evacuation will be dangerous and it may be safer to stay at home.

BEFORE THE BUSHFIRE SEASON

Your home and family have a much better chance of surviving a bushfire if your house and grounds are free of fire hazards and you know how to behave should a fire start.

Prevent Sparks Entering the House

- Fit fly wire screens to windows, doors and ventilators.
- Box in open eaves or cover with fine wire mesh.
- Board up the area below floors in timber houses.
- Use woven wire vents for under floor ventilation.
- Seal the flute spaces at the fascia board on corrugated iron roofs.

Remove or Reduce Fire Fuels

- Clear dry grasses and weeds away from all buildings and fences.
- Keep trees and shrubs clear of the walls; remove dead and overhanging branches.
- Clear dead leaves from guttering and roof gulleys.
- Make sure that trees and shrubs are clear of power lines.
- Don't let rubbish accumulate on the ground; burn, bury or remove it.
- Remove wood and other flammable material from underneath buildings.
- Reduce the size of your woodheap and locate it well away from buildings; clean up bark and chips often.
- Provide a properly constructed incinerator for burning household waste in an area clear of vegetation for 3 m (10 ft).
- Point safety valves on LP gas cylinders away from the house.
- Store flammable liquids in proper containers in safe places.
- Keep lawns and gardens tidy and if possible well watered.

Water Supplies

- Where there is no town water supply, keep tanks full and check that pumps are in good working order.
- Make sure that water points can be easily found by fire fighters.
- Provide standard threaded taps at all water outlets. Have at least one tap well clear of the house with enough hose connected to reach right around the house and outbuildings.
- Check all hose, hose connections and washers. Be sure hoses can be joined for added length. Keep hoses near taps and in the shade.

Fire Equipment

- Make sure of your fire fighting equipment. You need at least a knapsack spray, drums, buckets and other water containers, rake, wet bags, fire extinguishers and a first aid kit. Check that all equipment is in working order.

DURING THE BUSHFIRE SEASON

- Watch and listen for bushfire danger levels on television

and radio; note especially total bans on the lighting of fires.

- Continue to keep your house, fences and sheds 'hazard free'. Don't forget regular cleaning of leaves and twigs from the gutters and roof.

- Have fire fighting equipment ready and accessible at all times — make a daily check.

- Watch for fire or smoke.

When Bushfires Approach

- Provide food, water and a blanket for each person and place near the outside door farthest away from the approaching fire, ready to be taken if it becomes necessary to leave the house.

- Collect valuables and important documents and store in a fireproof site or place beside the food.

- Park the car in a completely clear open space such as a green lawn. Close the windows and doors and place blankets, water and first-aid kit inside.

Inside the House

- Remove exterior blinds, outdoor furniture and bedding from verandahs to within the house.

- Close all windows and doors and block any other openings. Block any gaps between doors and floor.

- Place a ladder at the manhole leading to the interior of the roof and have a bucket of water in the ceiling. Inspect inside the ceiling every 10 minutes for two hours after the fire has passed.

- Turn off gas and electricity at the main switches.

What to Wear

Thick woollen dry garments are safest. Avoid synthetics. Cover the whole body and wear a hat and shoes that won't melt or burn.

Water

- Connect hoses to taps. Block the downpipes with tennis balls wrapped in rags and fill the gutters.

- Fill the sink, bath and laundry trough. Fill buckets and other containers and place them around the house. Soak blankets and bags for use if required as fire beaters.

- Wet down eaves, walls and sills on the side of the house facing the flames. Continue wetting until it gets too hot and then go inside.

- If water supplies are ample, douse woodheap and other heavy fuel hazards.

Yourself

- Keep calm. Avoid panic by preparing to fight the fire.

- Keep a watch outside until the last possible minute for spot fires on the roof or other parts of the house.

- If the heat becomes too intense, shelter inside the house near a door on the opposite side to the approaching flames. Should smoke get thick, lie down and breathe at floor level where air is clearest.

- Should the house catch on fire, remain in its shelter for as long as possible and then seek safety outside. Leave by exits on the leeward side of the house. By this time the main fire front will have passed.

After the Main Fire Has Passed

- Before opening any door first feel it. If it is cool, open slowly and carefully go about checking the house. If the door is hot it may be dangerous to open as it indicates fire inside the room. Keeping the door closed will slow the spread of fire.

- Check the house and ceiling for burning embers and extinguish burning material around the house. Continue checking for at least 30 minutes.

- Remain at the house unless you are forced to leave or advised to do so by a fire control officer.

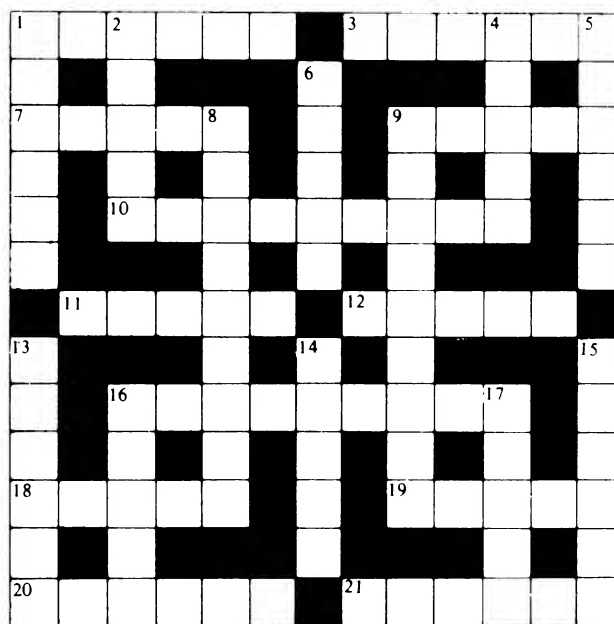
This article has been compiled from information supplied by the Queensland Forestry Department (*Information Sheet 4*) and the Country Fire Services Board of SA (*Plan for Bushfire Safety*), 20 West Beach Rd, Keswick 5035.

CRYPTIC GRASSWORD

by M. Riley, Newborough, Victoria.

- Across
1. Grounds for settlement.
 3. Frank can and did.
 7. A sound sleep induced.
 9. Cross words as a weapon?
 10. Car goes overseas.
 11. Eggs on chestnuts.
 12. They leave their mark and wax fat on fish.
 16. Charms in these ways.
 18. Plants and leaves in public places.
 19. Suit digger.
 20. Classes of fish?
 21. Food from Jersey you can picture with cake.

- Down
1. Keeps count.
 2. Takes pride in millions.
 4. Waterfalls.
 5. Take off from wide duct.
 6. Fresh plums fall.
 8. Leaves for one across.
 9. Lines served in prison.
 13. Take us to camp for students.
 14. Out, and haul in the boat.
 15. Steal coat.
 16. Grounds for change of heart.
 17. Keats raises ante.



Solution on page 58.

Poetry

FROM WYNNSTAY WINDOWS

*Through the lattice of my leadlight window,
The autumn moon is waning silver in a winter crisp sky.
It rose from the windswept Welsh hills
Lightening the chilly dark
Left by the dank departing dusk.*

*The sun set cold and golden through the rain,
Glaring off traffic and tarmac
And wet windscreen.*

*This evening trees stood black and skeletal against the sky.
This morning they were russet brown and gold in the sun.*

*Light and time and where we stand
Make things different.
What was golden may turn black.
In depressing dark, light can come as
Unexpected as the rainbow against the storm's canopy.*

*In solitude there can be sympathy;
In separation, togetherness.*

Alan Morgan.

DAY LIGHT

*Unseen fingers gently open
Multicoloured petals
Stretch up to greet them
Sweet droplets of dew
Rising invisibly
Silver glistens gone
Creatures quickly scurry
Hidden sanctuary
Morning.*

Megan Jenkins.

GRACE

*a small dot of wisdom
in the bottom of our heart
says
what there is
isn't*

*still mind
silent noise
closed eyes
see the night*

*my soul takes me
to suns of light
uplighting
beyond
there is
and
there isn't*

*dormant or alive
a small ray of clarity
in the bottom of each heart
says
what there is
isn't*

Veronique Gledhill.

GHOST FROM THE PAST

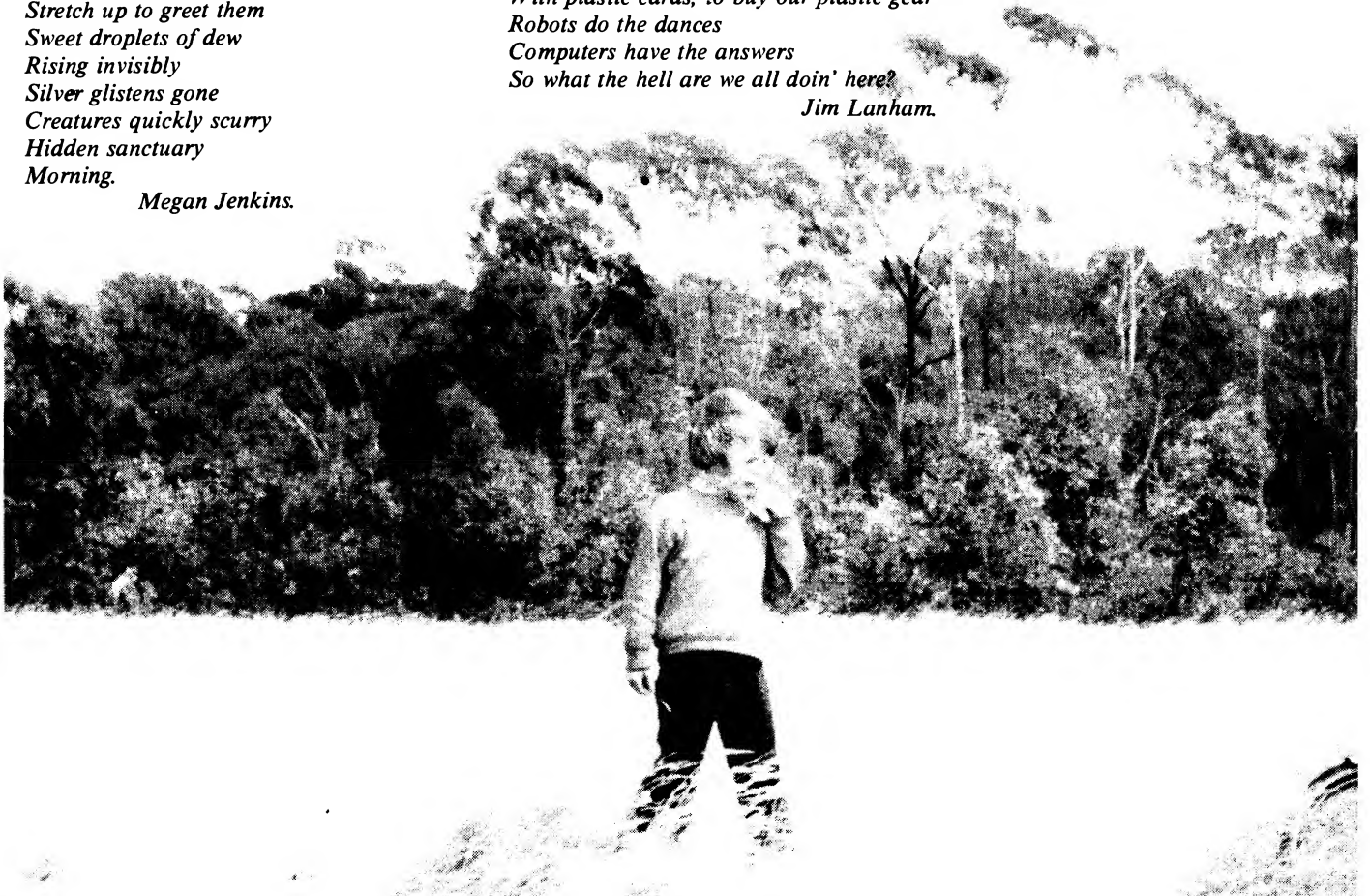
*Disappeared from the landscape
Has the swagman of old,
Who weathered the seasons
From the heat to the cold.
A symbol of legend
With swag on his shoulder,
Looking no different
Although he grew older.
A tenant of outback,
Fine scholar of nature,
A life of contentment
Had moulded his stature.
Gone now is his presence,
Long gone through the years,
Past with the bullocks
And the click of the shears.
No longer to wander
Along the bush tracks
The swagman's dreams faded
In the peaceful outback.
Buried there in the valley
Beneath tall silver gums,
In the land that he loved
But the city man shuns.*

Jean Opperman.

LIMERICK

*The day the dollar dies is drawing near
With plastic cards, to buy our plastic gear
Robots do the dances
Computers have the answers
So what the hell are we all doin' here?*

Jim Lanham.



PROGRESS IN PARADISE

Six o'clock a.m.
Cacophony of barking
Boisterous, bullied our
Habitual journey begins.
Hazy sun filters through silver eucalypt
Circled scorched earth — unreachable horizon,
Frantic good morning greetings,
Startled ancestral — curious calls.
Calm creek trickles toward unknown destination
Camouflaging a seething mass of activity,
Wild duck scatter angrily as jumbo jet pelicans
Approach familiar marshy landing strip.
Scent of hungry hunted fox — smell of freedom.

Now electric fences surround newly sprung mansions,
Ownership — loudly — proudly displayed.
Private property — trespassers prosecuted
No through road — no admittance.
Mortgaged millionaires drive irreverently
Creating dust storms on unsuitable terrain,
Restrained — trapped, the leash tightens.
End of an era,
The future begins
Only solitude, silence, sleep
At six o'clock.

Maureen Edwards.

RHINOCEROS STORY

In the East African
grasslands
a solitary rhinoceros
feeds on shrubs
and trees

Tanklike body
playfully rolls
in dust

Resting beneath
the afternoon sun

Shortsighted
short tempered
Oxpeckers poach off
its hide

Drinking from a waterhole
at sunset

In the East African grasslands
a carcass rots

In the market place
horns are carved
into dagger handles.

Jules L Koch

MEDITERRANEAN LITTORALS

hydrofoil ferries on stick insect legs
diesel fume into harbours

settled at quays
passengers with antennae arms
greet and farewell friends

almost as thick as flies
swallows over mediterranean roofs

slow sea beat
a rock awash
and someone snorkelling for octopus

salty buttocks and bare breasts
burnt and profuse
as storm stranded jellyfish

B A Pascoe.

CAUGHT IN A STORM

In slivered fire of icy flame
Lancing from the angry sky
I wondered why —

oh where,
Oh where have you gone,
My bonnie blue brolly?

What was my blame
That Heaven so incensed
Would dare to pour its icy spill
Upon my mackless back?

Stephen Legge.



Kids Pages

Hi GR Kids,

It's been a great year and although I was homesick earlier on I really settled down and at the end loved school and boarding so much I didn't want to come home.

The last day of school was a ball. It was really hot and we ended up having a water fight and becoming totally saturated. Unfortunately I and a few friends got sprung and we had to mop out the toilets. Actually I'm quite used to mopping now as it is the main punishment used in the boarding house for talking after lights out. Megg and David tease me about how often my name appears on the punishment board — I guess I just talk too much. In fact I'm still catching up on sleep lost because of all those enthralling midnight conversations.

It was really sad saying goodbye to all my friends at the end of term, especially as a couple won't be coming back next year. I know I wrote this last year but I read somewhere that the friendships you make among fellow boarders last forever and I think this is true. Someone I'm missing now is this really cute guy in my class. We get on really well and he even gave me a ring for Christmas . . . I can't wait until February when school goes back to see him again.

Although I miss my friends it's good to be home again having a chance to sleep in and just see all the animals again. I've been learning how to cook and Megg and I have been taking turns cooking the evening meal. I've also been giving her a hand with the poultry, there are so many and so many different breeds. It's amazing Megg can remember them all, she seems to know every chook by its face.

Well, Christmas has been and gone and as usual it was lots of fun. We had a small gum tree as a Chrissie tree and the smell of it is still lingering. We kept it for as long as possible as it always seems a let down when all the decorations are packed away. Hope Father Christmas brought you some terrific presents.

love, Suni.

Dear Suni,

We are having our school breakup next week and it will be fun. We are having a picnic in the park and we are having games and races. My teacher said Father Christmas will come. I have a little brother called Thomas who is four and a duck called Dandy. I am six and a half.

Kylie Allen
WARWICK 4370.

Dear Kids Pages,

My auntie has a donkey and it had a foal and they called it Tinker. Tinker isn't a baby anymore but it isn't a big donkey yet. I liked the story about the donkey and I would call the baby Tinker.

Jamie Willis
ARMIDALE 2350.

To Atma Lacey

Dear Atma,

Thank you for your lovely letter. My favourite instrument is the ocarina. I played to the whole school one day. I hope that you had a great birthday on the tenth of September. I want to send you something special but I can't as I lost your address. Please write again and send me your address. I will be waiting. Love from,

Elanna
96 Old Ipswich Rd
RIVERVIEW 4303.

BOOK REVIEW

Backyard Bush and Beyond — written by Prudence Grieve and illustrated by Jennifer Green. Hard cover, 32 pages.

It is difficult to say who this book will delight most, adults or children, as there is so much in it that will appeal to both. It presents a child's eye view of the backyard garden and other happy childhood haunts — park, beach, nearby bushland. Butterflies, ants, worms, spiders, snails and all the other familiar and unfamiliar creepy crawlies that inhabit our vegetation are there, together with native birds, possums, an echidna — plus some of the introduced species like domestic cats and dogs and birds like sparrows, starlings and pigeons. Each picture contains a mixture of large and small objects, making it easy for the book to be enjoyed equally successfully by large groups of kiddies or an adult and child together. The actual illustrations are magnified and so real that you feel you are there, in the garden or bush, examining nature. Special touches like the peeling label on the Vegemite jar, the Rosella brand bottle of sauce and well known Willow brand rubbish bin add to the realism of the scenes and give a nice touch of familiarity and homeliness. *Backyard Bush and Beyond* is a book many children — and some adults — will learn from although its main function is to give pleasure, which it does beautifully.

Published by Hyland House and distributed by Lothian Books, 11 Munro St, Port Melbourne 3207. RRP \$14.95.

MYSELF — BY MYSELF

Bored and don't know what to do? Tired of reading, sick of the same old toys, not allowed to watch TV? What about making a book — starring yourself? Start a scrapbook listing information about yourself, what you like and don't like, special hobbies or interests, best friends, moments to remember — and those you wish you could forget — movies you've seen, books you've read. Paste in favourite photos of you and your family, pets, friends, bands or pop stars you like, sports stars, clothes and anything else you can think of.

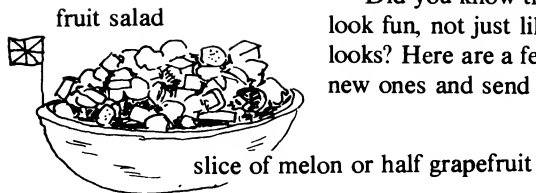
Perhaps you can title it *Myself When 10*, or 11 or whatever age you are, and you could go on adding to it over the year. You may even be able to interest your teacher in setting it as a project although it would probably be more fun if you just worked on it at home in spare time when you're bored. Happy writing.

Why couldn't the skeleton go to the dance?

He had no body to go with.

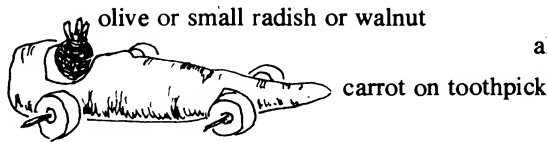
FUN FOOD IDEAS

Did you know there are lots of ways you can make food look fun, not just like the way an ordinary carrot or radish looks? Here are a few ideas, maybe you can work out a few new ones and send them in.

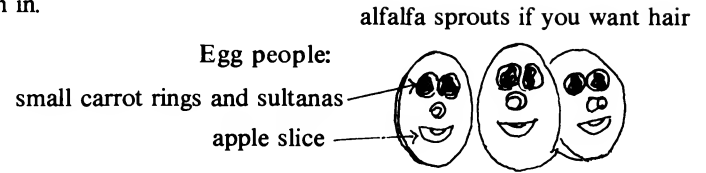
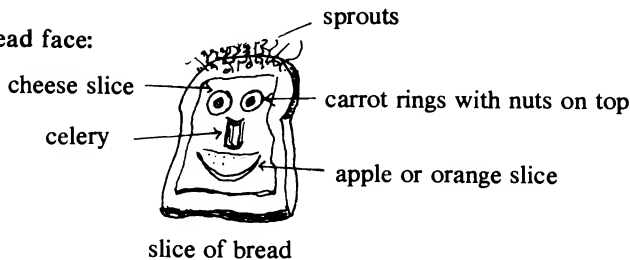


Melon or grapefruit boat:
cherries or strawberries (look like heads of people)

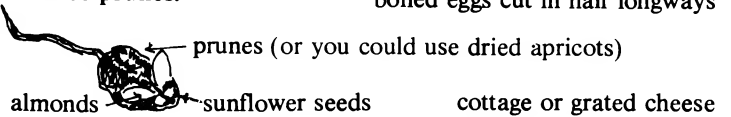
E-type carrot:



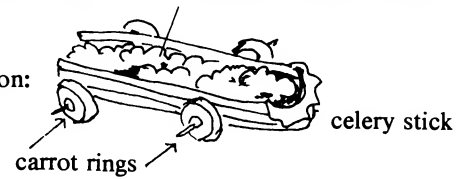
Bread face:



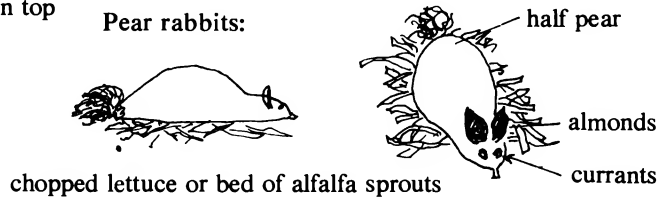
Mice prunes:



Celery wagon:



Pear rabbits:



ROLLING RATTLE

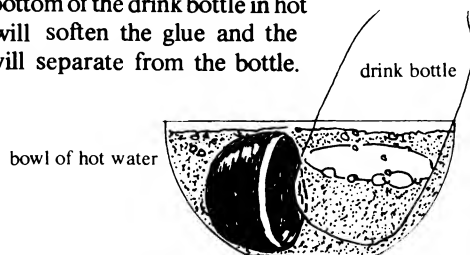
If you have a little baby brother or sister in your family, or friends or neighbours have, then maybe you can make this inexpensive little toy for them. Babies of crawling age will love pushing this around and it is light enough to be picked up when they are a little older.

You will need:

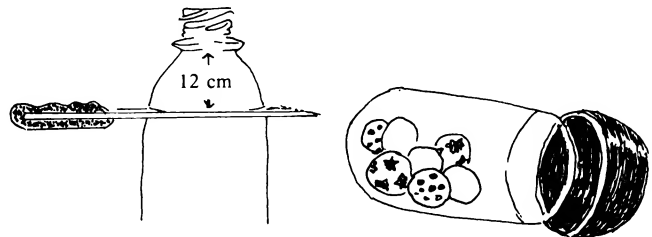
- non-returnable soft drink bottle (with black base)
- table tennis balls or other small, light interesting toys — but make sure that they are not small enough to choke a baby if accidentally swallowed
- serrated knife for cutting plastic
- strong glue
- textas to decorate the table tennis balls

Here's what you do:

- Soak the bottom of the drink bottle in hot water — this will soften the glue and the black base will separate from the bottle.



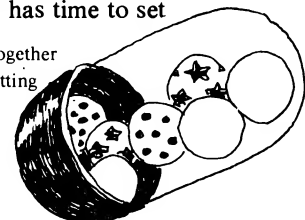
- Cut off the top section of the bottle about 12 cm (5 in) from where the threading for the lid finishes. Measure this and mark with a texta for a straight cutting line.



- Decorate your table tennis balls or small toys — funny faces, geometric designs, whatever you like — and insert into the cut off bottle.

- Liberally squeeze glue around the top of the base then fit securely onto the open end of the bottle. Hold in place for a few minutes so the glue has time to set

hold the two sections firmly together for a few minutes while glue is setting



While the Billy Boils...

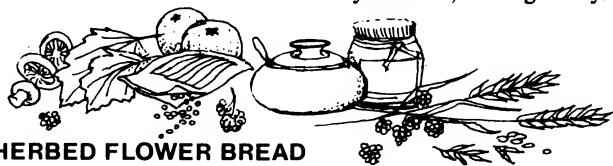
February is still hot and the temptation to eat outdoors is ever present. Our readers have contributed some tasty suggestions that can be prepared ahead and are delicious eaten cold. So pack a lunchbox and treat yourself to a picnic outside in the shade.

MARY'S STUFFED VINE LEAVES

- 25 large vine leaves
- 250 g (½ lb) long grain rice
- 2-3 tomatoes, peeled and chopped
- 1 large onion finely chopped
- 2 tbsp sultanas
- 2 tbsp pine nuts
- 2 tbsp chopped parsley
- 2 tbsp chopped mint
- ¼ tsp of both ground cinnamon and allspice
- black pepper
- ⅓ cup olive oil
- ¼ tsp powdered saffron
- 1 tsp sugar
- juice of 1 lemon

Soften the vine leaves by plunging them into boiling water until they become limp. Soak and wash the rice in boiling water, then rinse it under the cold tap. Leave to drain. In a bowl, mix the rice with tomatoes, onion, sultanas, pine nuts, parsley, mint, cinnamon, allspice and pepper to taste. Place one leaf on a plate vein side up. Spoon 1 heaped teaspoon of filling on the leaf near the stem. Now roll up folding in the edges as you go to create a small cigar shaped parcel. Continue until all the filling is used up. Line a large pan with spare vine leaves to prevent sticking, then pack the parcels in tightly. Mix the olive oil with ⅓ cup of water and the saffron. Add the sugar and lemon juice and pour over stuffed vine leaves. Place a small plate on top of the leaves to prevent them unwinding. Cover the pan and simmer for 2 hours, adding water occasionally. Cool before turning out. Serve cold.

Mary Bunner, Montgomery.



HERBED FLOWER BREAD

- 2 cups whole-wheat flour
- 7 tsp baking powder
- ½ cup sunflower seeds, roughly chopped
- 2 tbsp sesame seeds, ground
- 1 tbsp caraway seeds, whole
- 1-2 tbsp rosemary flowers and leaves (or flowering dill, thyme, basil or marjoram)
- 2 large eggs, lightly beaten
- ¼ cup honey
- ¾ cup milk or water

Mix together the flour and baking powder in a bowl. Add the seeds and the flowering herbs. Mix in the eggs and honey. Stir in enough milk or water to completely moisten the batter and continue mixing until the dough leaves the sides of the bowl. It will be slightly sticky. Pour batter into an oiled 20 x 10 x 7.5 cm loaf pan. Bake in a pre-heated 170°C (340°F) oven for 40-60 minutes or until a toothpick inserted in the centre comes out dry. Turn out of the pan and cool on a wire rack.

Anita Crosby, Paynesville.

MUSHROOM STRUDEL

- 10 leaves of filo pastry
- 226 g (8 oz) butter
- 500 g (17 oz) chopped mushrooms
- freshly grated pepper
- ½ tsp ground caraway or dill seed
- 250 g (9 oz) cream cheese
- ½ cup sour cream
- ½ cup yoghurt
- 1 cup fine breadcrumbs
- ¼ cup freshly chopped parsley
- 2 spring onions
- juice 1 lemon
- 1 tbsp poppy seed

Steam the mushrooms and drain them. Cut the cream cheese into the hot mushrooms, tossing until the cheese melts. Add remaining filling ingredients. Mix well. Melt the butter. Lay a leaf of the filo flat on a wooden surface and brush with melted butter. Add another leaf and brush with more butter. Continue to stack the leaves until you have a pile of five. Apply half the filling and roll up tightly. Brush the top with butter and sprinkle with poppyseeds. Place on buttered tray. Repeat this process to make second roll. Slash each roll into thirds on the diagonal. Bake 25 minutes at 190°C (375°F). Serve hot or cold.

Jan Denham, Palinyewah.

ORANGE SALAD

Peel three oranges neatly and slice across into circles. Add a few onion rings, salt and pepper to taste, and a dressing of oil and vinegar with a little water. Leave in fridge for several hours. Decorate with parsley or mint.

Margaret Wagenhofer, Lima East.



MULBERRY BUTTER FILLING

- 125 g (¼ lb) butter
- 1 cup fresh or frozen mulberries
- 375 g (¾ lb) castor sugar
- 3 well beaten eggs

Warm the butter in a saucepan. Blend mulberries and pour into butter, gradually add sugar stirring until melted. Pour mixture onto the egg mix then return it all to saucepan, stir over low heat until it thickens. Use as a filling for individual tartlets or pastries.

Jennie Budd, Vic.

SESAME SLICE

- ½ cup honey
- ⅓ cup peanut butter (saltless)
- 250 g (8 oz) sesame seeds and sunflower seeds, mixed
- ½ cup coconut
- vanilla

Melt the honey and peanut butter, remove from heat and stir in the rest of the ingredients, combining well. Press into a rectangular biscuit tin and bake in moderate oven at 180°C (350°F) for half an hour. Allow to cool before cutting into slices.

I Chambers, Mt Gambier.

BLACKBERRIES

by Dot, Moora Moora, Vic.

Introduced to Australia last century, blackberries have become a noxious weed in Victoria. But although they are a curse in the paddocks and a painful nuisance to bushwalkers, blackberries still produce delightful fruit. You wouldn't be the first to appreciate them — seeds have even been found in the stomach of a Neolithic man. In the next few weeks you will be able to pick them by the bucketful, but if after eating them raw you wonder how to serve them, here are some suggestions. Remember that bottled blackberries are easy to do and extend the season throughout the year.

JAMS

Blackberry Jam

- 2.7 kg (6 lb) not too ripe blackberries
2.7 kg (6 lb) sugar
150 ml (¼ pt) water
juice of 2 lemons or 2 tsp of tartaric acid

Boil all ingredients except sugar until considerably reduced in volume. Add sugar and boil for about ten minutes until it jells. Store in hot sterilised jars.

Blackberry and Apple Jam

- 3.6 kg (8 lb) blackberries
1.4 kg (3 lb) sour apples
600 ml (1 pt) water
sugar

Boil blackberries and 150 ml (¼ pt) of water until tender, then sieve to remove seeds. (If the preserving pan is weighed now then the weight of the combined fruits can be easily calculated.) Peel, core and slice apples and boil with rest of water until tender, then mash well. Add sieved blackberries, weigh the pulp and add an equal weight of sugar. Simmer until mixture jells. Pour into hot sterilised jars and seal.

Blackberry and Apple Jelly (highly recommended)

- 900 g (2 lb) blackberries
900 g (2 lb) crab or sour apples
300 ml (½ pt) water.
sugar

Cut up apples without peeling or coring and boil all ingredients except sugar for about an hour, mashing with a spoon. Strain through a jelly cloth and let it drip for several hours or overnight. Measure the extract and add 450 g (1 lb) of sugar for every 600 ml (1 pt). Bring to boil slowly and boil until it jells.

DESSERTS

Blackberry Whip

- 450 g (1 lb) apples
450 g (1 lb) blackberries
gelatine dissolved in water
sugar to taste
2-3 tbsp water

Stew the apples in very little water and mash to pulp, or scoop out flesh after baking the apples. Stew the blackberries and sieve. Dissolve gelatine using 15 g (½ oz) gelatine per 600 ml (1 pt) of apple puree. Add to blackberry juice, sweeten to taste and mix with apple puree. Cool, but before it is set, whip well until light and frothy. Serve with cream or ice

cream. Alternatively, line a bowl with sponge fingers and set the whip in the centre. You will then have a summer pudding.

Blackberry Streusel Cake

Cake:

- 2 cups plain flour
3 tsp baking powder
1 tsp salt
 $\frac{1}{2}$ cup caster sugar
450 g (1 lb) ripe blackberries
60 g (2 oz) butter
 $\frac{1}{2}$ cup milk
1 egg

Topping:

- 60 g (2 oz) butter
½ cup plain flour
1 cup brown sugar
1 tbsp cinnamon

Cake: sift dry ingredients into bowl and rub in the butter. Add milk, sugar and egg and mix well. Spread mixture into a well greased 20 cm (8 in) cake tin. Arrange blackberries on top to within 2 cm (1 in) of the edge.

Topping: sift flour and rub in the butter until it resembles bread crumbs. Add sugar and cinnamon until well mixed. Sprinkle onto blackberries and bake in a moderately hot oven 200°C (400°F) for about 30 minutes. Cool for about 5 minutes before turning out.

Blackberry Pancakes

Make a flour/egg/butter/milk batter and add a cupful of ripe blackberries. Sweeten to taste and cook in the usual way.

Blackberry Pie

Put about 900 g (2 lb) of ripe blackberries in a pie plate, sprinkle with sugar to taste and top with shortcrust pastry. Make a hole in the pastry to allow steam to escape and cook in a hot oven 220°C (425°F) for 15 to 20 minutes.

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Setting Up a Goat Stud

by Jessica Gossow, Wooroolin, Qld.

So you are thinking of starting a goat stud. What a brilliant idea! I did — and succeeded — but not without a few problems and a fair amount of 'blood, sweat and tears' along the way. Before I go any further I would like to say that one of the main requisites, besides goats of course, would have to be a very understanding, tolerant and helpful partner who shared your interest in goats. I, on more than one occasion, have been told it's either the goats or me! Fortunately, I still have my dear husband and my goats, but at times I've really wondered if it has been worth all the hassles.

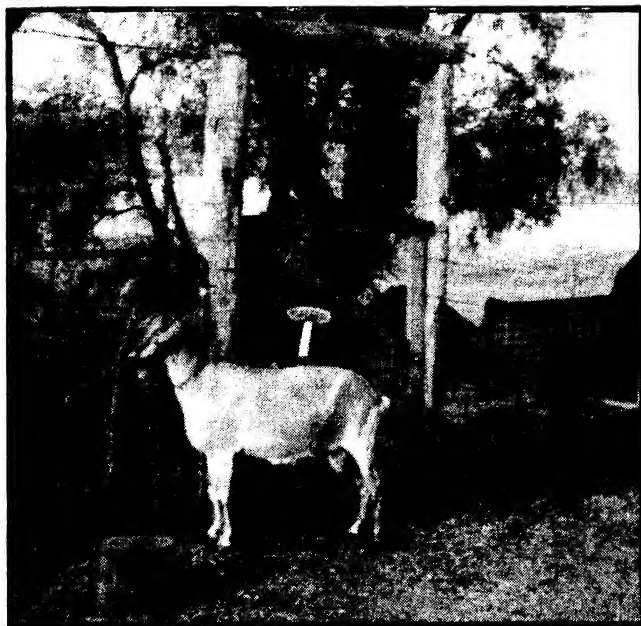
Mind you, on occasion John my husband has had every right to get upset. It's not easy to see a young mango tree that you've nurtured with love and special care deftly munched down to a little spike sticking out of the ground in a few short seconds, or the nectarine tree that's bursting with new green shoots everywhere ring-barked and stripped bare. It even took me a little while to forgive my girls over that small escapade. The only ace I had up my sleeve was that the garden gate had been left open — by John!

IN THE BEGINNING

My love affair with goats began over ten years ago. I had for some time a feeling that I'd like a goat. Then by chance, as a nursing sister I attended a patient who worked at an abattoir. He mentioned that a whole herd of Angora goats had been slaughtered a few days earlier. I casually said that if he ever came across a particularly pretty little kid to let me know and I would buy it. To my utter surprise and consternation (because John had vowed and declared that there would never be a goat set foot on the place), less than a week later the children, the dog and myself found ourselves confronted by a beautiful little black and white creature with a pair of terrified big brown eyes. She was a feral goat about eight weeks old, trucked in from out west and awaiting slaughter. We fell in love with her immediately and with some trepidation brought her home. John after recovering from the initial shock couldn't resist her.

Sophie, as we named her, proved absolutely delightful. She became part of the family — one of the kids in fact, only sporting four legs instead of two. It never ceased to amaze me just how incredibly intelligent and agile she was. I'd tether her through the day and as soon as the children came home from school she was let off the tether to play along with them. It was nothing for Sophie to outwit the children when they played hide-and-seek or she'd beat them around the house by running up the steps and through the middle of the house to the other side, where she'd triumphantly wait for them. Obstacles were no bother either — she'd just jump up and over anything, cars included! She liked to be with the children upstairs (after all she was a kid too) but we had to keep an eye on her or next thing she's jump up on the table with one deft leap. One day I was getting food from the chest freezer and Sophie decided to pop up on top to see what I was doing. The startled look on her face, as she landed in the freezer with the frozen peas was a sight to behold!

Of course, Sophie thought she was human, until the day I



Lady at the entrance to the goat yard. Gates have to be extra strong and fences 'goat proof' to withstand the curious and usually determined explorations of this species.

decided to get a companion for her. It certainly took a while for her to even look at Lady Rebecca, let alone be friends with her — her jealousy took a while to overcome too. Even now she is the undisputed boss and ringleader — her wish is law and the herd follows.

Lady (for short) is an Anglo Nubian cross, a very placid and lovable goat whom I bought for \$25.00 through an advertisement in the local paper. I had decided after seeing all the breeds exhibited at various shows that the Anglo Nubians were the most beautiful and lovable animals I had ever come across. I fell in love with their long silky ears, unique Roman nose and naturally placid temperament. Their colouring ranges from light brown through dark brown and black to the mottled tri-coloured variety.

It wasn't long after I bought her that Lady, when let off her tether, quietly crept away to have her kids and promptly got lost — for two weeks. At that stage, I knew very little about pregnant goats and Lady, even now, is the silent type. You never know when she is in season or about to have kids, as she shows very few signs of either. I trudged miles around our area, put a lost advertisement in the paper and had finally given up hope of ever seeing her again when the neighbour, three miles away, rang to say there was a strange looking animal amongst his beef cattle! We never did find her kids — probably eaten by foxes or dingoes — and she was just a skeleton but I was delighted to have her back.

BREEDING MORE

By this time I was really hooked on goats and wanted to start breeding a few of my own. They advise in goat books not to have a buck unless you have more than five or six does. This is simple in theory. I managed to get a loan of a buck and Sophie

got pregnant, but Lady is a different story — she was just too fussy at that time. I then decided to get serious about breeding Nubians, made arrangements and took her off to a Nubian stud. Lady boarded there for three months, fretted and then came home, not pregnant (as we found out later). I took her to another buck when I thought she was showing signs of wanting a mate. The buck took one look at her and turned the other way — no doubt I was twenty-four hours late! As I couldn't afford a registered buck I decided to buy an unregistered one out of a registered doe for \$10.00. Satisfaction at last, Lady got pregnant.

Once again I answered an advertisement in the paper — an Anglo Nubian herd was being sold as wild dogs were mauling them. I had decided to sell my original buck and get another with more breeding as I was keener than ever to upgrade my small herd. Remus was eight months old, unregistered but with excellent breeding and cost \$30.00. I just couldn't resist Sasha, a beautiful little mottled four month old doe, so I bought her for \$20.00. She was unregistered but actually an Appendix A doe. Now I felt as though I was really getting somewhere with my Nubians.

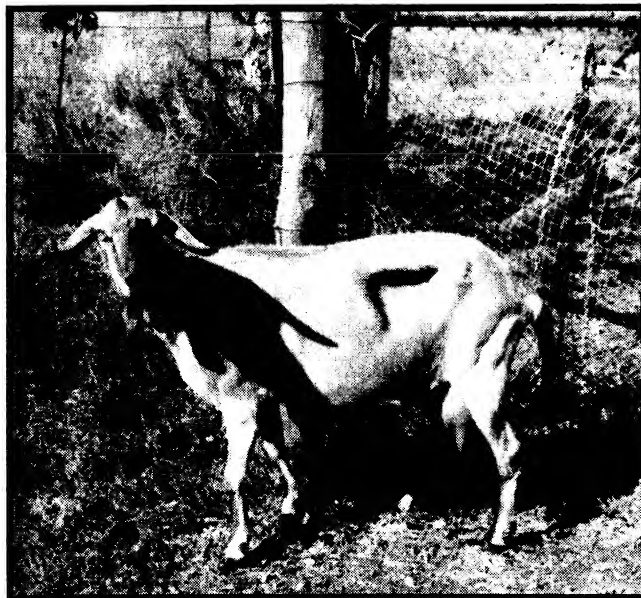
I kept Sophie, as she is still part of the family, but all her kids (and she is a prolific breeder) I sell for a small sum of money or give away if need be. The other does' kids I price for their breeding. Advertising in the local newspaper has always been successful for me. Lady's doe kids I like to keep as she is a large goat with a beautifully shaped body and udder. So far I have Lady Louise, Lady Sharlotte and Loretta as her offspring. It really is amazing though, how hard it is to get doe kids when you want them. Out of eleven kids only two were does — one was Sophie's, which I sold. The other died through the negligence of a vet. Loretta even had the hide to have triplet bucks, twice in succession!

MANAGING THE HERD

Tethering goats is OK but I found that the chains can tangle no matter what precautions are taken, so check your goats frequently, change their positions every day and make sure they have ample shade and water. A bucket in an old car tyre will prevent spillage. I also found that invariably one of the swivels (one at either end of the chain to help prevent tangling), would wear through or a collar break or a steel peg pull out of the ground and the respective goat would always, but always, make a beeline for John's newly planted avocado trees. I cannot tell you how many times the one poor tree was nibbled and consequently is so stunted now.

Eventually, through much persuasion John built a goat yard with 2 metre (6 ft) high fence posts, welded mesh (75 x 50 mm/3 x 2 in, so the kids can't push their heads through) and three strands of plain wire running along the top of that. It's perfect. The yard was great in plentiful times and when I only had a few goats, but when the kids came along I had to go back to tethering them out to feed and yarding them at night. So, more gentle persuasion (and I can just hear some of you saying, 'Poor John!'). I reasoned that a fence around the garden would be the perfect solution to guarding the avocados and anything else we may choose to grow. Finally, up went the garden fence and it's great — so long as 'people' remember to shut the gate!

John surprised me one day (he really is a darling, even though he doesn't share my love of the goats) by putting an old



Although an Anglo Nubian cross, Lady exhibits the large body size and unique Roman nose and long ears that typify this breed.

set of cement tubs in the goat yard (how we managed to get them there is another story) and hooking up a float to a water line. The main outlet to the tubs was sealed off thus allowing the water to run through to the other tubs. They have continuous fresh water now and it's marvellous.

Now my goats free range feed, and unless you plan to go into goat breeding commercially, either for milk or fleece, don't consider buying feed for them on a full time basis — unless of course, you can stand it financially. A small amount of feed given occasionally, encourages them to come when they are called and makes them easier and quieter to handle. When free ranging they are far less prone to disease, as they can fossick and get a more balanced diet of bark, leaves and various weeds besides a little grass.

ESTABLISHING THE STUD

Last year I invested in a registered buck kid and building up a goat stud of my own began to jell in my mind. I obtained the address of the Dairy Goat Society of Australia, PO Box 189, Kiama 2533, wrote away for information and duly became a member. Choosing a name for a stud was harder than I thought. I had in mind an Aboriginal name but after sending down some twenty or so suggestions and being told there were already studs with those names, I was seriously thinking I'd have to invent a name. At last I found 'Koorichirra' which I liked and which is Aboriginal for beautiful. Then too there is your tattoo which may end up being a little different to what you had anticipated. My suitable does were then classed as Appendix D does. This can be done either by a qualified classifier or by photographs sent to the association. I can now gradually grade my does' offspring up to Appendix A by using registered bucks. It is not only great to have stock that you have personally bred up to purebred, but when you sell it is also more rewarding financially.

MILKING

I chose a dairy breed firstly because I love the Anglo Nubians and secondly because it's great having milk 'on tap'. It's just so easy to walk outside, call the appropriate goat, spend five

minutes or so milking and have a daily supply of unadulterated, unpasteurised milk. Any milk that has been processed has a substantially diminished nutritional value. I also find that visitors are unable to tell the difference in taste between my goats' milk and the cows' milk they are used to. If your goats are healthy and disease free there is no need to boil milk for your own use. Raw milk has more nutritional value and used in a balanced diet is an excellent food and drink.

Goats are harder to contain than cows but otherwise they are generally easier to manage and they eat far less. In comparison to their size their milk production is higher than cows. I just tie my goats anywhere convenient to milk — this way too, there's never a certain spot where bacteria is likely to accumulate and be encouraged to grow.

Always treat goats' udders gently by wiping clean with a wet rag (renewed every day). I don't ever use antiseptics or any chemical additives in the wash water — they may kill harmful bacteria but they also strip the skin of its natural defences against infection. If you are milking more than one goat wash your hands between each milking with ordinary bar soap and running water and dry with a clean cloth or towel. I don't like using ointment either — it tends to work its way up the teat canals and carry bacteria along with it. Warm salty water (one tablespoon salt to a litre/1 3/4 pt of water) is excellent for bathing sore teats and wounds. Of course, if there is a bad infection, it will warrant antibiotic treatment. When milking, squeeze the teats gently, don't strip and drag at the udder. It's better if you don't completely empty the udder — after all the kids don't. I like to keep the kids on my milking does and just separate them from their mothers at night. In the morning, I milk what I want then let the kids run with their mothers during the day. That way, milking is not a chore and if we choose to stay away for a day or two, there's no worry of having to rush home and milk the goat.

Using the Milk

I make butter, yoghurt and cottage cheese — these are very



Jessica pictured with a three day old buck kid. Note the sturdy fence behind her.

simple to make and nutritious. For butter, let the milk stand in the refrigerator for a day or two and skim cream off. When you have enough, beat cream till it separates into butter and buttermilk. Drain off buttermilk, rinse a few times with cool water and add a little vegetable salt if desired. Buttermilk can be used in baking scones, cakes or biscuits and other savoury cooking. Use skimmed milk for general purposes or for cottage cheese and yoghurt.

Cottage cheese can be made with junket tablets, vinegar or lemon juice. I prefer a natural vinegar or lemon juice. Gently heat half a litre (18 fl oz) of milk to lukewarm, stir in the juice of one lemon and a pinch of vegetable salt (if desired). Let stand undisturbed for half an hour, then strain through a piece of clean stocking or muslin and hang to drain overnight. Add a little cream to the cheesy mixture and a few freshly chopped herbs if desired. Delicious!

I have a 'Dairy-O' for making yoghurt — it is non-electric. A glass jar that fits into a large open-mouthed flask would do the job just as well. Heat skimmed or full cream milk to 85-90°C (185-194°F). Allow to cool to 44°C (110°F) or lukewarm, stir in one heaped tablespoon of natural yoghurt to one litre (1 3/4 pt) of milk, mix well and pour mixture into warmed glass jar and cap loosely. Place in flask, cover with lid and let stand for four hours. Remove jar from flask and refrigerate. Add honey and/or chopped fresh fruit if desired.

A delicious, nutritious drink can be made with one rounded teaspoon natural coffee and one small teaspoon honey in a drinking glass. Dissolve with a small amount of hot water and add cold milk and ice cubes.

HINTS ON GETTING STARTED

For me, acquiring a goat stud was a gradual, unintentional process. It is a hobby I enjoy immensely, it brings me in pocket-money and we have our own dairy products. Plus there is a great deal of satisfaction in breeding my own line of Anglo Nubians.

If you are a beginner, firstly buy yourself a good book on goat keeping, then start small. Buy one or two healthy goat kids from a reputable breeder. If you buy through an advertisement in the paper, try to get somebody who has knowledge of goats to come along with you. With one or two goats, you get to know their ways and they in turn get to know and trust you. The expenses are gradual and you learn as you become more involved. Tether them to start with and handle them so that they become very quiet. Now, if you wish to continue, they must be well controlled, and remember to shut gates! Goats are extremely fussy eaters — they like the best, your garden included, and will go to great lengths to get what they want, especially in dry weather.

Goats take very little looking after. Check their hooves and trim, more frequently in soft soil country. If you free range your goats and live in a drier area, worming and spraying should be done only infrequently and then by using natural methods where possible. I am personally very much against chemicals for human or animal consumption and never resort to them unless absolutely necessary.

If you have milking goats, mate them at different times, so you have a year round supply of milk. This can be done more effectively if your does and buck are separated, by either tethering or a buck yard. The gestation period is five months



Anglo Nubians come in a variety of colors but the mottled tri-coloured goats are possibly the most attractive.

and I like to keep my kids at least two months before selling.

With anything from twenty goats upwards, dairy or fleece, you would have a full time small business. Of course, the more you have the more lucrative you could expect your business to be. Goats' milk is in good demand and fleece has enjoyed high prices for some time. The Department of Primary Industries, or equivalent in your state, can give all the necessary information for starting a dairy.

Last, but not least, love your goats — they are exceptionally intelligent animals who respond beautifully and you will be well rewarded.

To register a doe, that doe must have conformation, type and colour to conform to a particular breed's standard. You then apply to have it registered, either by the acceptance of a certified classifier or by sending a full photo of either (or both) sides of the doe to the Kiama Registration Centre. That doe is then (if accepted) classed as an Appendix 'D' doe.

To upgrade your herd from an Appendix 'D' doe you mate her with a registered herd book buck. Her doe kids can then be registered as Appendix 'C' does. The Appendix 'C' doe is then mated with a different registered herd book buck and her doe kids can be registered as Appendix 'B' does and so on, up to Appendix 'A'. Thus you can grade up your herd from an ordinary goat of a particular breed through to a purebred of the same breed. The original doe can be a crossbred e.g. mother — Nubian, father — Toggenburg, but if she shows enough Nubian breeding she can be classified as Appendix 'D' Nubian and registered as such.

Australian Goat Husbandry, by Pat Coleby, is a very useful basic reference on all aspects of goat keeping. \$10.50 posted from Night Owl Publishers, PO Box 764, Shepparton 3630.

PENPALS

My name is Ian Baker and I am 10 years old. My hobbies are soccer, drums and drawing. I would like to write to anyone in my age group, from anywhere in the world.

70 Lewin St, BARDON 4065.

G'day. My name is Carly Sewell and I am eleven years old. I would like a girl or boy penfriend around my age. My interests are gymnastics, pandas, designing clothes, going places and meeting people.

PO Box 620, MOSSMAN 4873.

PENPALS

Hi! My name is Aldona Hamulczyk and by the time this is published I will be 16 years old. My interests are reading, writing, travelling, cooking, sewing, basketball, aerobics, cycling, bushwalking, gardening and classical music. I would like to write to people of either sex, from all over the world, preferably aged 13-20.

16 Monash Cres, STH CLAYTON 3169.

Hi! My name is Joanna Nowicki and I'm looking for a male or female penpal between the ages of 13-15 anywhere around the world. My interests are reading, drawing, dancing, sailing, camping, horse riding and much more. So if anyone is interested in writing to me, I'm waiting for your letter. I will answer all letters.

45 Sinclair Dr, CAROLE PARK 4300.

My name is Kathleen Barnsley and I am 8 years old. My interests are reading, sports, swimming, animals, being a Brownie, and writing letters. I would like to write to girls and boys 8-10 years old.

Lot 24 Redlands Dr, GOWRIE JUNCTION 4352.

I am twenty-three and I live on 40 acres not far from Cooma with my partner and our two children. We're interested in conservation and a healthy lifestyle and hope to be fairly self-sufficient soon. We are building a rammed earth home at the moment. I enjoy reading, gardening, looking at the bush, music, learning to play the guitar and writing letters.

Wendy Gibson, 'Steeptack', BUNGARBY 2630.

Hi! I am a 20 yr old drama student and I'd love to hear from people anywhere around the world. My interests are theatre, photography, wildlife, world religions, self-sufficiency.

Nyree, 5/199 Hotham St, ELSTERNWICK 3185.

Hello! My name is Natasha Ryan and I'm 8. I would love to have a penpal who lives in the country because we had to move back to the city when our house burned down and I really miss life on the farm. Now we live next to the beach, which is great too. I love reading, music and writing and I'm just starting drama classes. Please write.

3 Jones St, THIRROUL 2515.

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Gourd Help Us! or A Gourd For All Reasons

Part II

by Isabell Shipard, Nambour, Qld.

What's round, orange and lumpy? Long, green and stripy? Yellow and spherical? Hooked? Bulbous? The answer is always a gourd. Last issue described their endless variety and their ease of cultivation.

As your vines produce their fruit, you'll be delighted by the variety of shapes, sizes and colours of gourds that develop on the different plants. These characteristics will dictate the uses to which you can put your gourds. Consider the ripening fruit carefully and many diverse craft projects will come to mind.

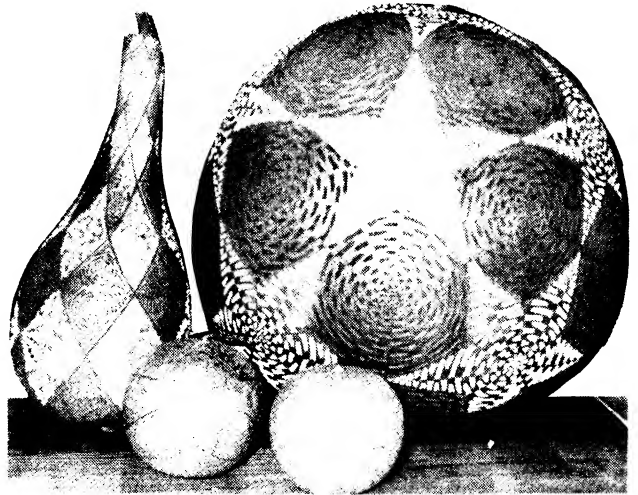
HARVESTING AND DRYING

Don't be tempted to pick your gourds too early — to keep well they must ripen on the vine. Wait until the stem of the gourd and the tendrils next to it wither and die, then cut stem with a sharp blade, leaving 4-6 cm (2 in) on the gourd. Handling gently to avoid bruising, brush off any dirt and wipe over with one of the following: diluted non-bleaching disinfectant; vinegar and water; 2 tablespoons of borax in 1.2 lt (2 pt) of water.

Place gourds in a dry airy place out of direct sunlight, turning every 3-4 days to aid even drying and prevent shrivelling. Lagenaria or hardshell gourds may be placed in net bags and hung up to dry, enabling the air to circulate all around them and avoiding the need to turn the fruit. Any grey fungus that develops can be wiped off with vinegar and water. Hardshells in particular may become covered with a dark mould or show a light patterned mosaic effect. This can be left as decoration or the gourd washed, dried and scraped to reveal the pattern left on the wood under the skin. Once gourds are mature (2-6 months) they will not decay — any that go soft may have been picked too soon, bruised or have some infection. These should be discarded. When the gourds are thoroughly dry the seeds inside will rattle. Wait — don't try to hurry them. After several weeks of airing the smaller ornamental gourds can be coated with wax, oil or varnish.

CRAFTING WITH GOURDS

The possibilities here are limited only by your imagination. The finished product will be dictated by the size and shape of the gourd you work with — useful household objects,



As well as making useful containers, gourds may be simply decorative. These have been carved and stained in all over geometric patterns, ornaments, toys, musical instruments and gifts of all kinds. The skin is usually removed and the gourd decorated by cutting, engraving, burning or dyeing. If gourds are soaked in warm water for a short time, it will make them much easier to cut and prevent splitting and breaking. Make sure the gourds are dry again before finishing with lacquer or wood stain. Essential tools are a small hand saw, sandpaper or steel wool, knife, wood glue, paint and brushes, chisels or engraving tools. Other natural dried objects like pods, seeds or twigs can be added to your creations.

Here are a few suggestions to get you started:

- The luffa gourd lends itself well to the creation of people, dolls and animals: remove the outer skin when dry and pin, sew or model the fibre into the required shape.
- A small gourd dried, cleaned and painted makes an excellent container for potpourri. Close the top with a cork or stopper carved of wood. Drill several small holes in the gourd to allow the fragrance to seep through.
- Hardshells can be made into planters or hanging baskets. Coat the interior of the gourd with varnish or several layers of melted paraffin wax to make it waterproof.
- Next time your children are bored, give them an assortment of dried gourds, a bowl of water, a dull knife and some sandpaper — you'll be amazed at what they'll create!

Crafted gourds are great for gifts, street stalls and for earning extra income. Once started with this fascinating craft, you'll find endless ways of using them and wonder what you ever did before you discovered the wonderful world of gourds.

For more information on growing and using gourds, contact Isabell at Shipards' Herb Farm, Windsor Rd, Nambour 4560. Ph: 071-411-101.



This modern gourd bowl from Peru has a simple floral design etched into it by applying acid with a thin stick.

CHICKENS FOR THE TABLE

by George Hall, Avenel, Vic.

I started this practice some 8 years ago, grew a batch from day old chicks, but did not do any more for quite a few years. Some 18 months ago I decided to give it another try as I had stopped eating red meat but still ate chicken and was concerned about media reports that they were being fed on chemicals and growth hormones.

I bought day old roosters and had to keep them for 5 months before they were large enough to kill. The flavour and texture and taste was out of this world and so I was hooked. For my first experiment I thought I would try day old meat chicks which are bred wholly for meat purposes. I was told they could be killed from about six weeks, but I found this very hard to believe (not much of a life). The cost for 30 (they sent 32) plus freight on rail from Melbourne was \$18.40. I purchased mine from K & L Thomas Hatchery, Box 73, Cranbourne 3977. Ph: 059-982-206.

For a heat source (to replace their mum) I use a galvanised dustbin lid with a light globe socket screwed into the top centre. Initially I use a 150W light globe, kept on 24 hours a day, and the temperature stays at approx. 24°C (75°F). If chicks crowd too close to the globe you know it is not warm enough but if they are using the whole area it is OK. I have a draught free area in my garage set up for this purpose, and when not in use it can be easily dismantled and stored away for the future. On the concrete floor I use insulation batts to keep the cold out, but thick newspaper would probably do just as well. This is covered by a piece of carpet which has spread on it wood shavings to absorb the droppings. The area used is approx. 0.75 x 1.8 x 0.75 m (2½ x 6 x 2½ ft). On cold nights it is kept covered with an old piece of felt. Most of the materials used in the construction were recycled from our local tip. Waste not want not.

A plentiful supply of clean water is essential and is dispensed from a soft drink bottle inverted into a small dish, which is cleaned and filled twice daily. They are fed chicken crumbles and introduced to chopped up greens immediately — grass, silver beet and so on. It is interesting to note that stock feed is much superior nutritionally to what us poor humans are fed.

They stay in this environment for approx. 3 weeks, then are transferred into my back shed where I have an area set up permanently for this purpose. A small run outside next to my boundary fence allows them sunshine (some sources say they don't need it but I feel they deserve some enjoyment in their short lives). Heat is still required for warmth but by this stage

I am gradually weaning them off the heat by reducing the heat output, i.e. 150W, 100W, 75W, 50W, then only on at night, then not at all. This reduction depends on feather growth. Woodshavings or sawdust on the floor are essential, I have to clean it out 2 or 3 times a week. Next time I will only get a maximum of 15 chicks at a time. I did invest in a feeding hopper to cut down on waste. The water trough is an old square plastic container holding 10 litres (2 gal) and the same in the outside run.

For food, I keep on chicken crumbles and slowly introduce them to grain plus a mash of pollard and bran (50/50) with a handful of shell grit mixed in, and keep up the greens. I have only ever lost one chick.

My schedule was as follows:

Aug 15: chicks arrived 6.45 p.m.

Aug 17: white feathers started growing.

Aug 25: 150W-100W.

Sept 4: transferred to back shed, have to physically put them out in the morning and in at night for 3 or 4 days till they get used to it (no mum to show them). 100W-75W. Pollard bran, shell grit, small amount of grain mixed in with crumbles in hopper.

Oct 1: introduced layer pellets mixed with crumbles and grain.

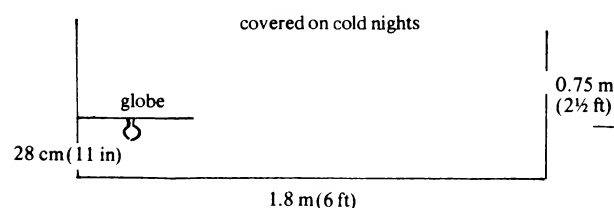
Oct 5: started killing larger birds.

This is probably the least pleasant of the tasks that have to be done. Don't feed the night before. I have found it a lot less personal if one cuts their heads off with a machete on a block of wood, unless you know how to wring their necks. I feel the chopping method is a lot less painful and quicker. Allow the blood to drain, dip chicken in very hot but not boiling water, adding a bit of washing up liquid soap to the water (this allows the water to penetrate the feathers more easily). Remove all feathers, then remove feet and the end part of wings. Enlarge the vent and remove insides. Then hand to willing or unwilling partner to finish removing these bits of feathers you missed. Bag and fast freeze.

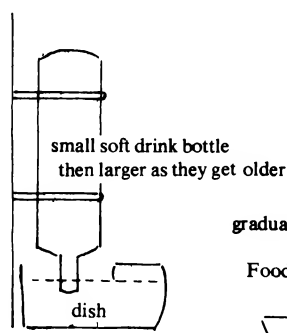
The chickens' living area is then completely cleaned and all wooden surfaces painted with creosote. In the outside run the top 5 cm (2 in) of soil is removed and composted and fresh

Equipment used for raising chickens.

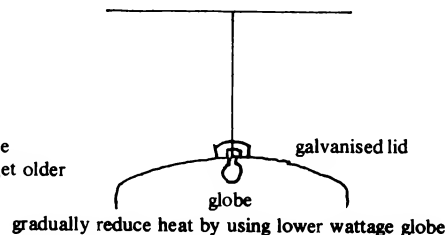
Brooding enclosure



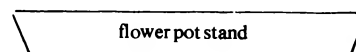
Water supply



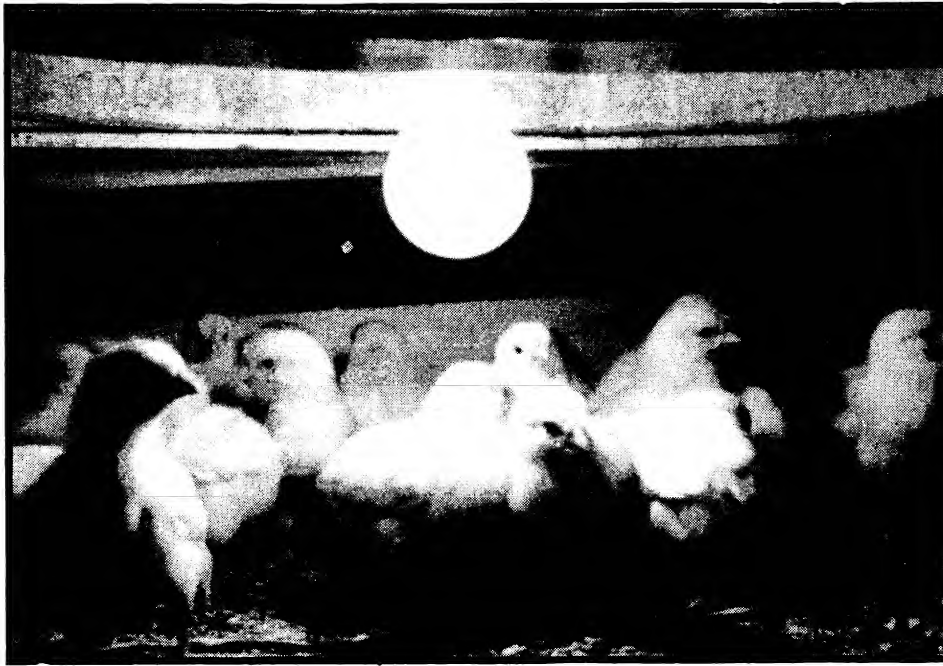
Heat source



Food supply



can be used for first 2-3 days, but they scratch and then won't eat it — wasteful!



These commercial broiler chicks are already solid sturdy little fellows although only three weeks old. The homemade brooder heater — a galvanised dustbin lid with light-globe attached — is both inexpensive and extremely efficient.

soil is put in ready for the next lot. By doing this I have so far had no disease problems at all. Day old meat chicks have to be ordered a month in advance, payment is made, you are then notified as to when they will arrive, and the rest is up to you. You may find that you can't imagine on day one how you are ever going to kill these nice fluffy creatures, but by week 9 they are just chickens. Don't get attached to any, treat all of them the same.

I found that to kill them at between 9 and 10 weeks maximum was best as if left any later they don't put on any extra meat, only fat. I know this might be hard to believe but the last 10 I left a couple of weeks longer (because I was sick of killing and plucking them). I found them next to impossible to pluck, don't know why. I think the chickens you buy in supermarkets are probably only about 5 weeks old. The weights were on average about 1.5 kg (3½ lb). I killed the largest first and worked down, some get more feed than others and grow fatter.

Cost was approx. \$3.22 each. People might say, that is what you pay in the supermarket, my answer to that is, you have never tasted the home grown variety. I can buy free-range chickens locally at \$5.60-\$6.00 each, they still taste nothing like mine. Even if the cost was more I would still do my own, as I know what goes into them.



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CRYPTIC GRASSWORD

Continued from page 45.

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SMALL FARMERS' FIELD DAY

The 9th annual Small Farmers' Field Day will be conducted at the Carisbrook Trotting Complex, 6 km east of Maryborough in Central Victoria, on Sunday March 5th, 1989. This Field Day, organised by the Shire of Tullaroop, is designed to provide information to people who are living or are considering living on small land holdings. The increasing number of people buying small properties in Victoria has caused the Small Farmers' Field Day to become an important means of accessing information through trade displays, lectures and discussion panels.

Each year the organising committee attempts to introduce new material in the lecture series. This year lectures will include 'Farm Financial Management and Computers', 'Remote Power Systems' (looking at the most suitable combination of systems for different situations) and 'Irrigation Systems' (concentrating on drip systems).

A regular feature of the Small Farmers' Field Day has been the presentation of an award to someone with an innovative new enterprise applicable to small land holdings. The State Bank Farm Entrepreneur Award will again be sponsored by State Bank Victoria which will award a monetary prize. The Victorian Economic Development Corporation will provide a trophy and financial advice to the winner of the 1989 Award. The two equal winners of the 1988 Award will present short talks about their enterprises 'Cashmere Goats'.

and 'Farm Fodder Trees'. They will be introduced by Greg Cahill from the Department of Agriculture and Rural Affairs' Bendigo Office who will discuss 'New Enterprises'.

An important aspect of the Field Day is the trade display. Exhibits range from alternative energy systems and fire fighting equipment to fencing gear and earth moving equipment. Applications for sites in the 1989 Trade Display can be obtained from the Shire of Tullaroop's Office on 054-612-244. Information which can be obtained at the various sites will include the safe and appropriate use of chemicals, small motor maintenance and courses on farm management which are available through education centres. Catering and entertainment will also be available at the complex.

Further information about the Small Farmers' Field Day can be obtained from the Municipal Recreation Officer at the Shire of Tullaroop on 054-612-244.

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TOMATO GROWING

This tasty summer veggie is one that can successfully adapt to most growing conditions.

Because they are such a popular fruit, here are a few tips on how to grow tomatoes successfully:

- Start by planting seeds in containers. About six weeks later transplant the seedlings into the garden. Transplanting should be done on a cloudy day or late afternoon or evening.

- Before disturbing the 'hardened off' seedlings make holes for them in well prepared soil. The holes should be 35 cm (14 in) apart and 15 cm (6 in) deep. Put a handful of compost in each hole.

- Water the seedlings well and put a cutworm collar made of newspaper around each one. SM3 added to the water will also help.

- Carefully place each plant in a prepared hole, a little deeper than it was in its first container. You may find that if the plant is put in sideways, that is with some of the stem covered as well, more roots will develop and so make a stronger plant.

- Refill the hole and gently firm the soil around the plant.

- Water in well and water daily for the first week. When they are settled, tomatoes like a regular, even supply of water — a good soaking once a week on heavy soil, and once every four or five days on light soils. Always test the soil before watering because overwatering is harmful. It is best to water tomatoes in the morning, but if you water late try not to wet the leaves.

- Do not mulch immediately after transplanting as the young plants enjoy the warmth of the sun on the soil. But you must apply a thick mulch when the weather (and the soil) have really warmed up. Mulch does much good, including protecting low-growing tomatoes from rotting on the ground.

- Support tomato plants with a 1½ m (5 ft) stake for each plant, firmly pushed into the ground at planting time 15 cm (6 in) away from the plant. As the plant grows, tie a strip of old cloth tightly around the stake and loosely around the stem of the plant (leave 5 cm/2 in of slack). Add ties as the plant grows taller.

- Prune staked tomatoes so that the strength goes into fruit production and not into suckers (shoots) and undue leaf growth. Pinch off most suckers that grow out from a stem above the leaf branch. Remove suckers at least twice a week during the heavy growing season, but if the weather is very hot leave some suckers near the top to form an 'umbrella'. Keep the lower part of the plant well pruned. You can pinch off the tip of the main stem above the top blossom to keep a flourishing plant from growing any higher. Do this when the plant is outgrowing its support, or towards the end of the season.

- Sidedress the tomato plants when the first tomatoes have just formed, and then once again during the season. Draw a circle around each plant about 10 cm (4 in) from the stem — this is called the 'drip line'. Deepen this circle into a furrow about 2.5 cm (1 in) deep. Put a small handful of good plant food into the circular furrow — we use dried manure or compost or crushed bones. These organic plant foods do not burn the leaves or stems.

Reprinted from the newsletter of the Organic Growers' Association of NSW, September 1984, PO Box 2, Bringelly, 2171.



Tomatoes can be grown successfully in pots on high rise balconies or city verandahs — or in the garden if you are lucky enough to have one.

ACHIEVING 'THE GOOD LIFE'

by Nevin Sweeney, St. Clair, NSW.



Angela, Linda, Nevin, Romaine in their productive city backyard.

Following Megg's plea in 'Gumnut Gossip' (GR69) for more contributions about urban efforts at achieving 'the good life', I decided a reply was in order. I hope my story is of some interest and or inspiration to other readers.

In 1977 I took my newly acquired wife and headed for the wilds of St. Clair, a new estate in outer western Sydney. I had enthusiasm but little or no real knowledge of gardening (organic or otherwise) or most other self-sufficiency skills. Thus, my first attempt at planting the wrong seeds, at the wrong time of the year, direct into sun baked clay was doomed from the start. This was pre *Grass Roots* for me after all!

I had read parts of a book by Michael Allaby titled *The Survival Handbook — Self Sufficiency for Everyone*. It was written for English conditions and so not very applicable, but I had found a conspicuous lack of home grown information on self-sufficiency. It was, however, an interesting book and motivated me to search farther afield.

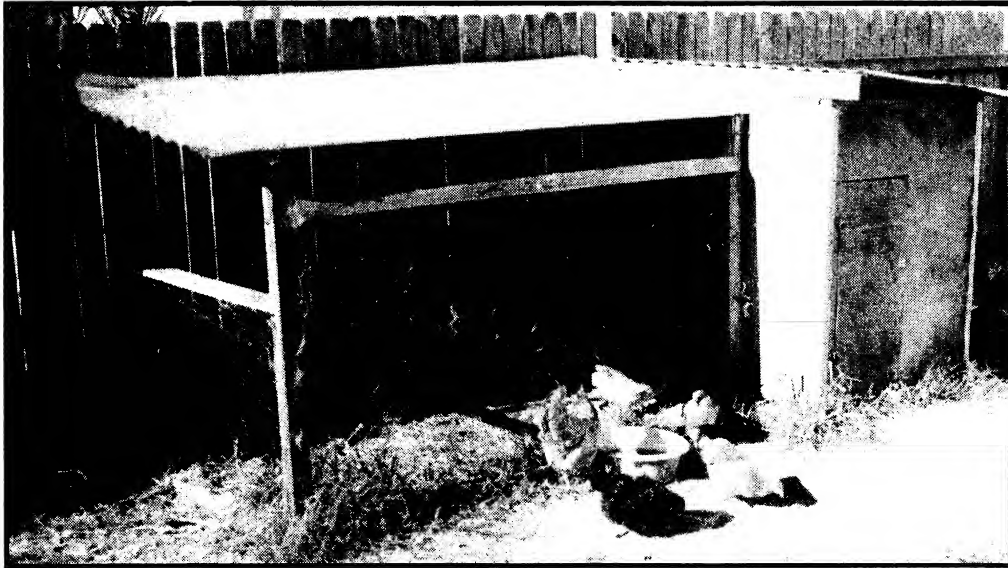
I played at vegie gardening but not much else for a couple of years until we were able to put a garage on the side of the house. All of a sudden, I had a workshop/storage area so I could finally do something! When the garage was built, a place was needed to accept rain runoff from its gutter. The local council said 'Rubble drain'. I said 'Oh no, my vegie patch! What about a rainwater tank?' The council said 'What! Oh... OK'. So I put in a 2275 lt (500 gal) tank followed a few years later by another of the same size. I now had an independent water supply. The garage also allowed me to start a project which I had in mind for a number of years — a 12 volt lighting system for the house.

One of the first things we bought for the house was an open fire. Ten years ago, they weren't so 'trendy' and wood was cheaper and easier to find. Now, unless you have a tame wood supply, wood burners aren't necessarily an assistance to

urban self-sufficiency. Wood is storable, true; but so is kero and you can fit a lot more ergs into a smaller space! We had also put on solar hot water when the wife left work with No. 1 (Angela). What we needed now was an independent electricity supply for lighting plus odd bits and pieces like radio and rechargeable torch (for a more comprehensive discussion of the 12V system see GR 62 pp 68-69). We now have a 12V lighting system with lights in most rooms of the house, the garage, back shed and over the wood pile, all driven by one photovoltaic panel and a battery bank. The 12V system took time, thought, effort and money, but to me all were well worth it. It is still evolving as better products and ways of doing things come up. A 12V generator/welder based on a petrol engine and car alternators is on the drawing board as is a home built wind generator. All things take time and the quest for self-sufficiency never ends.

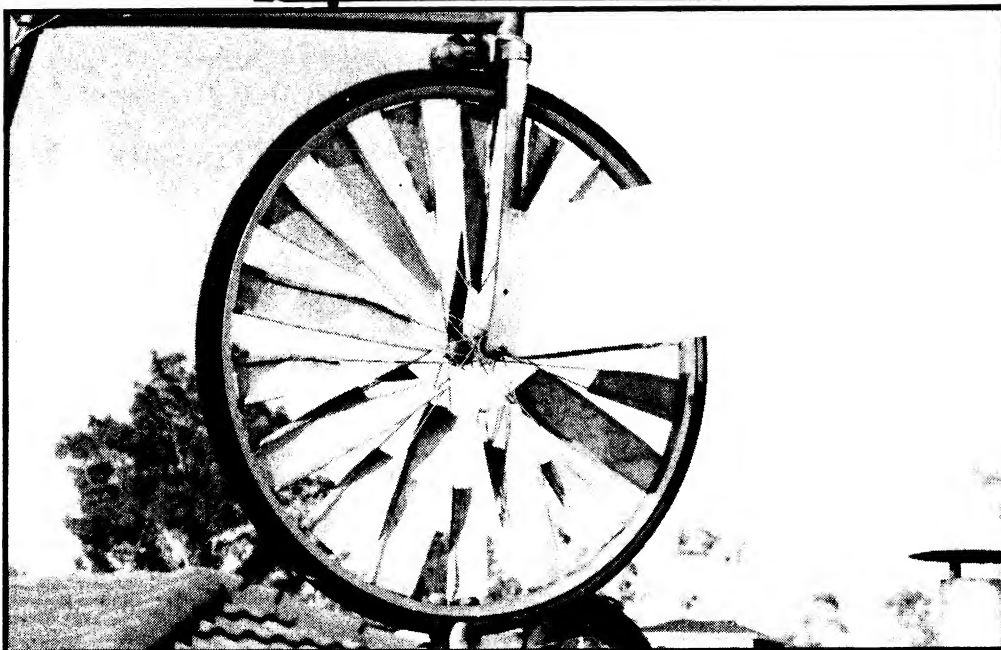
While all this high tech experimentation was going on, the vegie patch was improving too. With the discovery of mulching and composting my yields were improving with less work in weeding and watering. It was about this time also that I decided a few fruit trees would be good; two of the three originals (mandarin, peach and apple) are still alive and thriving. We currently have eight fruit trees in the back yard — two peaches, one apple (granny smith), one orange, one lemon, one lemonade (a new variety), one mandarin and a banana tree. Along the way I managed to kill two lemons and a peach as well as the original apple, mostly through wet feet (see GR 69, p. 22 for Nevin's advice on dealing with this problem). I try to learn from my mistakes, so the rest will survive (I hope).

After I had been progressing well with the fruit trees, I decided it was time for another self-sufficiency quantum leap — to chooks! Due to council regulations, full size chooks are

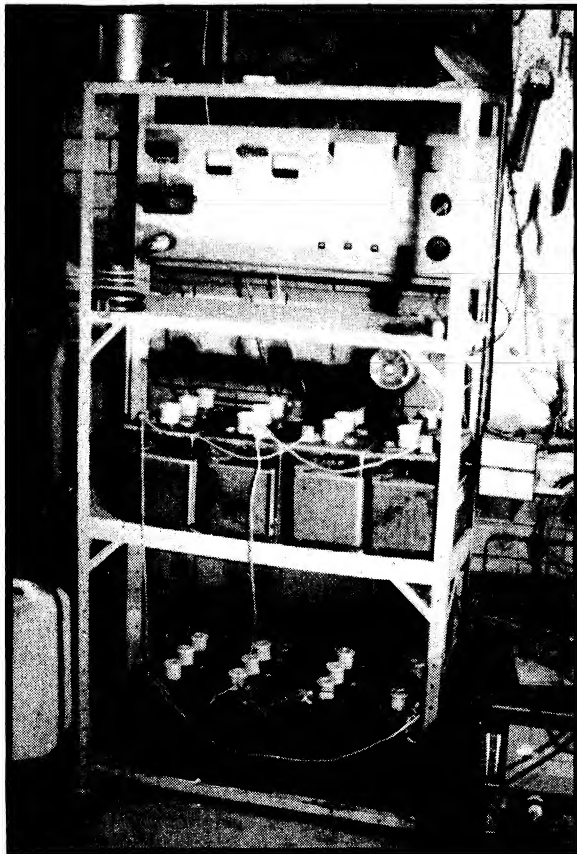


Council regulations prevent us keeping full size fowl but bantams are categorised as 'cage birds' so we are able to keep four of them plus two inbetween size hens.

Nevin harvesting the spoils from his compact, highly productive garden. Mulching and the addition of compost helped improve soil quality and cut down on watering.



The homebuilt wind generator has vanes attached to the spokes of a bicycle wheel and provides back up power for the 12V system.



The battery storage and fuseboard for our 12V system, which provides power for lighting and small appliances.

forbidden (shades of Big Brother!), but bantams are 'cage birds' and so OK. We have six at last count which free range over the backyard (except the vegie patch of course!), supplying us with anything from one up to six eggs a day, all on leafy bits from the vegie patch, scraps and some imported (from outside the fence line) grain, especially in winter. Chooks are truly amazing, supplying eggs, fertiliser and entertainment as well as composting vegie scraps for us, and at minimum cost. No urban self-sufficiency person should be without them where possible.

Back to the vegie garden again, and things are still improving! For self-sufficient gardening two points worth investigating are growing your own seedlings and saving seeds from your own vegies. For starting seed early I built a mini plastic house (plans to come in a future article) which in summer doubles as a solar dryer for produce. Placed on the north side of our house it will raise tomato, cucumber, zucchini seedlings etc. earlier so I can get a head start when spring comes. As for seeds, you can't be self-sufficient if you dutifully go out every year to K-Mart for your seeds and seedlings. A booklet brought out by the Henry Doubleday Research Association called *Seed Production for the Australian Home Vegetable Gardener* (Allen and Christina Barry, authors) is of great assistance here. I use as many of my own seeds as possible, but you must have non-hybrid seed to start with. Some biennial seeds are a bit difficult e.g. carrots, but leaving a couple of your best plants in over winter to flower next year can provide good quantities of seed.

With all the fruit and vegetable produce you can grow,

preservation of the excess can be a problem. The aforementioned solar dryer works well for me on some things but lately I have discovered the old Fowlers Vacola bottling outfit. Second hand they can be quite cheap to buy although new lids and rubber rings are invariably needed. I am still experimenting with mine — a few bottles of this or that to see what is agreeable to the family and what is not. Fruit done in the Vacola bottler is especially popular.

One project which I have had in mind for years has been vetoed by my partner in self-sufficiency — bees. Apart from the obvious harvest of honey, tame bees can increase your fruit and vegetable production by increasing flower pollination. However my wife said 'What about the children?', so that killed that. There is another point also worth raising, that urban honey will tend to contain poison spray contamination from other people's gardens, as well as good old pollution. Perhaps the lack of bees is for the best after all.

The one main asset which has enabled me to go as far as I have is the garage/workshop where I can make those bits and pieces, repair tools, fix the car and things that go wrong in the house. Being self-reliant for repairs requires tools and at least some spares as well as a place to work and store/organise your tools and spares. This is a side of self-sufficiency less glamorous and more work than vegie gardening or 12 volt power, but a well equipped workshop can save you big dollars in repair costs and work you can do yourself when building greenhouses, solar dryers, wind generators and the like.

The quest for self-sufficiency never ends, basically because you never quite achieve it! There are always new projects, ideas and systems to be tried or old ones to be improved or modified (I have had a herb garden in the pipeline for a couple of years — next year for sure!). When you have to work and look after a family time is precious but even in the urban area some independence from society is possible with a bit of time, some money, but more than anything else . . . perseverance. So don't put off your vegie garden, chooks, 12 volt system or whatever until you 'head for the bush'. Making your mistakes now while you still have support systems in place will be less costly and traumatic and will enable you to be that little bit better prepared when you do make the break. So go ahead, do it now.

What's outside makes the house, but it is what's inside that makes it a home.

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Due to technical problems the release date is now February.

Poultry Breeders Directory, RMB 2115, NAGAMBIE 3608.

TREES FOR BEES

by Bruce Ward, Goulburn, NSW.

Planting trees is a longterm project with attached longterm pitfalls. Careful planning is necessary to ensure the planting fulfills its requirements without upsetting other aspects of the property concerned. Here are some aspects of planning a tree planting programme for beekeeping purposes.

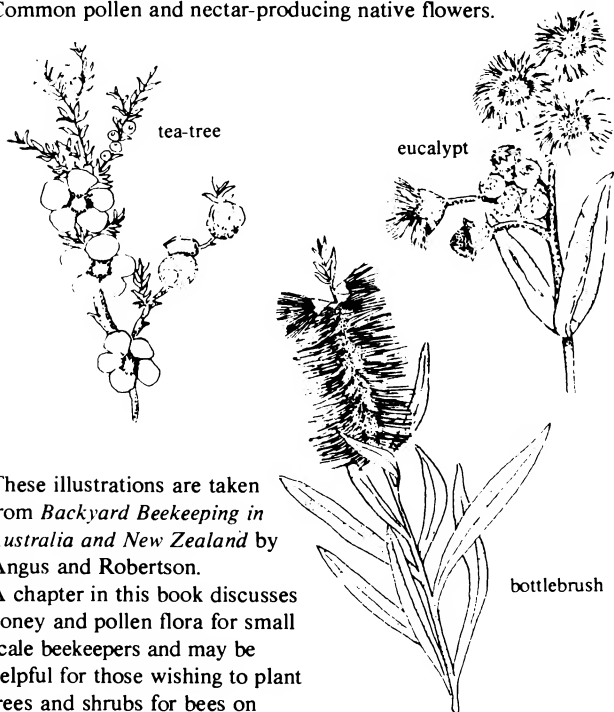
POINTS TO CONSIDER

Before proceeding with a tree planting programme clearly define your aims. Most beekeepers will be interested in improving the beekeeping value of their land whilst adding to the appearance and improving the vegetation on the land. There may be other longterm goals such as providing timber, firewood or fence posts. Try to think of all aspects when selecting your longterm aims.

When looking at the value of a tree for beekeeping, you need to look at the following:

- nectar production — where possible select trees which are likely to produce well in your area and complement the local flora;
- pollen production — trees yielding good pollen are very important, particularly those flowering when pollen is short;
- flowering time — in colder districts you should avoid trees which flower during winter. As a general rule winter flowering plants are a health hazard for bees in cool weather;
- flowering length — do not expect to be able to produce commercial crops of honey from a normal planting but aim to provide some support forage for the bees, with a good range of trees flowering throughout the production year;
- soil type preferences and growing requirements;
- attractiveness to bees;
- age at which flowering starts and flowering cycle (years).

Common pollen and nectar-producing native flowers.



These illustrations are taken from *Backyard Beekeeping in Australia and New Zealand* by Angus and Robertson. A chapter in this book discusses honey and pollen flora for small scale beekeepers and may be helpful for those wishing to plant trees and shrubs for bees on their land.

POSSIBLE PROBLEMS

Beekeeping may not be your only interest in life, so consider the effects of the trees you plant on the rest of your activities. The most common problems with tree planting occur in the long term and include interference with power lines, sewerage, drainage and other aspects of land and house location. Keep large trees well away from buildings and power lines.

Crops requiring pollination can present other complications. Very attractive trees (attractive to bees) which flower at the same time as the crop can compete with the crop for available bees. This may well reduce the yield of the crop or the quality of the fruit.

Where bees are working an area which poses a danger, e.g. from pesticides, you may be able to divert bees to highly attractive diversionary flora. Plantings for this purpose are selected to flower at the time of highest danger and are planted at a good working distance for the bees. For example your neighbour on one side has fruit trees which he sprays with toxic chemicals in December each year. You may be able to plant a mass of trees and shrubs on the other side, which flower in December, to attract bees away from your neighbour's yard.

Planting trees takes a fair amount of effort and after-care. Only plant trees if you can look after them until they are established. Plan your tree planting programme so you can care for the full year's planting.

Further Reading

For information on the apicultural value of trees and plants refer to *Honey and Pollen Flora* by Alan Clemson (about \$45.00). Your local office of the Department of Agriculture should be able to tell you where to obtain a copy of this excellent book.

Reprinted from *Bee Briefs* Vol 2, No 3, February 1986, a publication of the NSW Dept of Agriculture, PO Box 547, Tamworth 2340.

HONEY BEES FOR POLLINATION

Many fruit, vegetable and seed plants depend on or are benefited by insect pollination. Inadequate pollination can result in reduced or delayed yield and a higher percentage of inferior fruit. Good crop management includes ensuring sufficient pollinating insects. For most crops the honey bee is the main insect responsible for the transfer of pollen from the male to the female organs of the flower.

Honey bees are very efficient pollinators and are specially equipped in having a dense covering of branched hairs. These hairs entangle pollen grains and allow transfer of pollen from flower to flower as the bee collects both pollen and nectar for food. Below is a table to show the number of bees needed for pollination of some crops.

Crop	No of bees/1000 flowers
apple	1
cucumber	10
kiwi fruit	6
rockmelon	100
watermelon	10

Reprinted from the *BOGG Newsletter*, Feb 1986, PO Box 236, Lutwyche 4030.

HERBS FOR YEAR ROUND ENJOYMENT

by John Mason, Lilydale, Vic.

Now is the time to consider your herbal needs for the coming year. With a little preparation, you can ensure a continuous supply of herbs for all your household needs — culinary, medicinal and beauty care. This means preserving and storing those herbs which are plentiful now but which will not last through the winter.

HARVESTING

For the best flavour use secateurs to gather leaves and stems on a sunny morning just after the dew has evaporated and before the heat of the sun had dissipated the flavouring oils. The leaves of most herbs should be still green and tender and harvested just before the plant begins to flower. After flowering, many herbs have a bitter taste and the leaves are not as aromatic because more energy has gone into the buds. However, harvest plants in the mint family when they are in full bloom for the best flavour — the new leaves at the tip of the plant are usually the best. Leaves and stems of several herbs may be harvested three or four times during the summer and others may be gathered all year round. The flowers of some herbs, including bergamot, chamomile, lavender and marigold, are flavourful and should be harvested when they first open and while still very fresh. Harvest fully mature seeds of plants such as mustard or caraway. Some seeds change from bright green to brown or grey as they mature.

DRYING

There are several methods which can be used for drying herbs. One way that is not recommended, however, is sun drying, because it causes too much loss of aroma, flavour and colour.

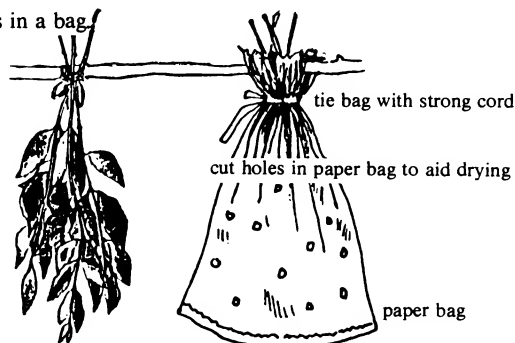
Preparation

Lightly rinse leaves and stems with cold water, either by submerging or holding under running water; shake off excess water. Cut off dead or discoloured leaves or stems. To prepare flower petals, wash, then separate petals and trim any tough or discoloured parts. If the flowers are to be used for tea, they must be dried whole. Seed pods, depending upon how much they have dried on the plant, may be left as is until the outer covering is sufficiently dried so that it may be easily removed. When the outer covering is fairly dry, rub the seeds between the palms of your hands, blowing to remove the chaff or husks. With some seeds, there is the possibility of insect contamination. To be sure all insects are removed, dip stalks and heads in boiling water and drain on a paper towel before drying. Do not dip or heat seeds that are going to be used for planting or they will not germinate.

Bag Drying

This is one of the simplest ways to dry leafy herbs with long stems. Tie the herbs in small bunches by the ends of the stems. Suspend them upside down in small brown paper bags which have been labelled. Tie a piece of string firmly around the top of each bag. Hanging them upside down will cause the flavouring oils from the stems to concentrate in the leaves. Cut several 1 cm (½ in) holes in each side of the bags to let air circulate and to speed drying. Hang them in the kitchen, attic or anywhere there is a warm even temperature and good air circulation. If you are drying large quantities of herbs and

Drying herbs in a bag



hanging a number of bags in the same place, suspend them with different lengths of string to allow good air circulation between the bags.

When the leaves are sufficiently dry, usually in 5 to 10 days, they will crumble easily. Check by opening the bag and feeling the leaves. If they are dry enough, roll the bag gently between your hands so the leaves will crumble from the stems and fall to the bottom of the bag. Leaves that are not completely dry will go mouldy during storage, so make sure drying is complete. Seed pods with long stems may also be dried in bags. The seeds will fall to the bottom of the bag as they dry.

Oven Drying

This method removes much of the essential oil because a low constant temperature cannot readily be maintained. Most gas ovens usually generate enough heat with just the pilot light, but it is difficult to adjust electric ovens to keep the temperature below 40°C (100°F). If you use your gas oven with the pilot light, cover the oven racks with a nylon net or old window screen. Arrange the herbs or seeds one layer deep. Prop the oven door open slightly to let the moisture escape.

Microwave ovens may also be used to dry small quantities of herbs. Place 4 or 5 stalks with leaves between paper towels. Set the microwave timer for 2-3 minutes. Check to see if the stems and leaves are sufficiently dry. If not, reset the timer for an additional 30 seconds and check again. Repeat the process if necessary.

Room Drying

Room drying on a tray works well for herbs with large leaves, such as basil, or ones with short stems. Seeds and flowers may also be tray dried. An old window screen works well, is inexpensive and lets the air circulate. Wash it and cover it with a thin layer of cheesecloth. Place one layer of leaves, stems, flowers or seeds on the tray and cover them with another thin layer of cheesecloth to keep off dust and insects. Place the tray in a clean warm location, preferably on props such as bricks or wooden blocks, to allow the air to circulate underneath. Turn the herbs over every day or two so they will dry evenly.

Dehydrators

Dehydrator drying may be the most efficient and produce the highest quality dried herbs because it takes only 2 or 3 hours, has controlled temperature and good air circulation. Place the prepared herbs on the drying trays in a preheated dryer with

the thermostat set for about 35°C (90-100°F) and dry. Do not dry herbs with moist loads of fruit or vegetables. Not only will the increased humidity lengthen the drying time for the herbs, but fruits and vegetables are usually dried at a much higher temperature than herbs. These higher temperatures dissipate the herbs' flavouring oils.

Testing For Dryness

Herbs are dry when they crumble easily. Stems should be brittle and break when bent. Seeds will readily fall from the chaff, but usually need additional drying after they have been removed from the seed pods. Seeds should be brittle. If herbs and seeds are not sufficiently dry, they may develop mould.

To ensure that sufficient moisture has been removed to prevent moulding during storage, place the herbs or seeds in an airtight container for several days. Check daily for condensation on the inside of the container and if it appears dry the herbs or seeds longer.

STORAGE

Dried Herbs

Package dried herbs and seeds in any type of container which excludes air, light and moisture. Entry of air and light results in flavour loss; moisture encourages caking, colour loss or insects. Dark-coloured jars with airtight lids are excellent. Paper or cardboard containers will absorb flavouring oils and will not protect herbs from air and moisture.

Store containers of dried herbs and seeds in the coolest place available, preferably below 15°C (60°F). A cool storage temperature will keep them from fading and will hold the flavour better. Because the temperature of the kitchen is probably much warmer than your storage area, keep only small amounts ready to use and the rest in storage. Do not store kitchen containers directly over the stove. Crushing or grinding herbs and seeds for storage increases the loss of aroma and flavour. Whole spices have the longest shelf life, ground spices the shortest. For the fullest flavour, crush just before using. With good storage conditions dried herbs and spices should keep well for 6 months to one year.

Fresh Storage

When storing fresh herbs in the refrigerator, harvest them as usual, place in plastic bags or special crisper boxes, and refrigerate. Herb foliage lasts longer if washed just prior to use rather than before it is stored. This method is especially suitable in late autumn just before frost. This way fresh herbs are available well into the winter.

Freezing

Freezing is a very simple way to store culinary herbs for winter use. Gather the herbs at the specific times previously mentioned for drying, wash them if necessary, shake dry, and then place in plastic boxes or bags, properly labelled. Place these immediately in the freezer. The herbs can be chopped or left whole. The herbs can also be blanched before freezing, although it is not necessary.

Do not defrost the frozen herbs before using. If the recipe calls for minced herbs, it is easier to chop them while they are still frozen, since they break apart so readily. Chives, sorrel, parsley, dill, oregano, sweet marjoram, lovage, tarragon and mint leaves freeze well.

Another method of freezing herbs is to place the chopped herbs into ice cube trays filled with water. After freezing, place the cubes in a plastic bag, label, and store in the freezer. When needed just pop an ice cube with herbs into soup, stew, casserole or drink.

WEEVILS

Bay leaves are a deterrent to weevils in flour, pasta etc. Place whole leaves in food containers and sprinkle crushed leaves on shelves. To prevent weevils destroying seeds carefully collected for next year's crop, place seeds in an airtight container, leaving enough space to place a small candle in (birthday cake type). Also ensure that the lid of the container is not plastic! Before closing the lid, light the candle. When the oxygen is used up, the candle will go out. No oxygen, no weevils!

Penny Golding.

EARTHRAYS

- The Silent Killer?

An informative new book
by Harald Tietze

Learn to protect yourself-
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An easy to follow explanation of Earth
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Down home on the farm...

by David Miller



'It's your turn to write for this issue,' she called, 'and you have to do it today or you will hold up production!'

I sat at the breakfast table trying to work out how I could move without feeling another muscle in pain. I had been up at 5 a.m. three mornings in a row while our sheep were being shorn, spending the day sweeping up, throwing fleeces, rounding up more ewes, running them into the yards, the shed and the catching pen, and separating the wool from the sheep manure at the end of each day. I hadn't realised there were so many muscles in the human body, and each of them complained every time I moved. Well, at least shearing was finished for the last time, and the wool could be sold.

I stared into my coffee. All the effort had been worthwhile, really. Some time ago I realised that the cattle were going to take over the farm. Unlike the sheep, they would not get out through the holes the kangaroos and wombats made in the fences, they did not get flystruck and they did not need shearing. Well, that would simplify management. I have come to realise that simplicity is peace.

I tried to move. Nothing happened. Suddenly the voice came through the window, 'Come on will you!' I jumped up, stumbled through the porch door and nearly fell over a group of cats planning another raid on the kitchen. 'Just keep your feet moving,' I thought. Megg is up early and very organised this year. The big incubator is easier to operate, provides a more stable environment and is stocked according to a plan of how many of each breed need to be produced. We are managing the numbers well, and the birds are being sold early. Last year they were kept on for months, which took far too much of our time, and the feed costs were enormous. Breeders are better off with young birds, anyway. They cost less to buy and grow up more resistant to the diseases on the farm on which they will be living.

I detoured to water the dogs. Our new addition was a beautiful blue Australian cattle dog, with red patches on his front. I had given him to Megg as a Christmas surprise, because we needed a better guard dog and fox alarm. This little fellow was working well in that role at 16 weeks old. He liked me, too, and had decided I was the boss, so would leave Megg to walk with me at the first opportunity. I always laughed at the thought — a boomerang Christmas present! But apart from this obvious intelligence, he has a lovely personality, learns and works well, and is going to be a large dog when he matures. At 3.30 a.m. this morning we had a fox attack in the house yard and one of Megg's favourite rare hens disappeared, so Lou is scheduled to be home guard from now on. Our normally complacent Feathers has realised that to stay on good terms with the feed supply she must lift her game. She has suddenly become everything one would want in a family pet — obedient, sensitive, attentive, always there when needed — and even stands patiently with her feet on the handle of the wheelbarrow to be patted.

I cannot put it off any longer, I thought. So I trudged up the steps and into the office. 'What on earth can I write about?' I suppose the greatest change around here in the last few weeks has been living with a teenager. The sweet little girl we sent off to school in 1988 has returned, transformed into an avid follower of the teen cult. This is a universal disease which usually strikes young adults when they are most vulnerable emotionally. The disease is virtually non-contagious, except for one very high risk group. These are people younger than those already afflicted. When the two groups come into contact the disease can spread rapidly to the younger group. As a warning to readers who have children coming into this high risk age group, I feel it my duty to describe some of the symptoms so they may take appropriate precautions.

The condition begins when the child starts to listen to rock music 'for relaxation', often at unusually late hours of the night. This is quickly accompanied by long periods spent alone in the bedroom. Suddenly the door opens and a parent is confronted with the question, 'How does this look?' This is a very tricky situation, as the wrong answer can permanently damage the relationship and (horror) prolong the disease. If you give the incorrect answer the first time, the child may disappear again, often for a shorter duration, reappear and will always say, 'Well, what about this, then?' Be careful here, if you fail this second chance adolescents may go into a state of unreality where they feel they do not belong to the family, and will not help around the house. Their symptoms become more severe. This stage is accompanied by letters from school friends during the holidays where there seems to be more written on the back of the envelope than inside it. The height of the disease is a feverish state which those afflicted call 'in love'. This is a period where the person emits long sighs from time to time, and hearing is affected — they have to be asked three times before they will do anything.

There is no known cure for adolescence, it must be left to run its course. In our case, even though the transistor has been on at all hours it has been a pleasure having Sunshine at home and being a part of the teenage phenomenon. We miss her when she is away, and it has been pleasant catching up on the happenings in the school year that we had not discussed before. I think it is easy to get into a stage where you do not communicate with children, and not only does this cause problems but you miss out on sharing their development as well. During the holidays she has been helping Megg with the birds, sharing the housework and learning to cook. She made a cake when some friends visited recently, which was very well received — it lasted about five minutes. So this new culture hasn't rendered her completely helpless. What is quite remarkable for Megg and myself, however, is that Sunshine and her friends all find the teenage culture of the sixties so exciting — we could have kept all our old clothes and records and saved them a fortune.

Recent Releases

On this page we present information about newly published books that we feel will interest readers, with details of prices and publishers. We no longer distribute books for other publishers so if you're interested in buying any of the books described here, please order them through your nearest bookstore.

THE FAMILY GUIDE TO NATURAL THERAPIES — Nancy Beckham.

A qualified and practising naturopath, the author has compiled a very readable and down to earth guide to home treatment. She emphasises preventative therapy through changes to diet and lifestyle, and discusses the causes and possible treatments for most common ailments with case histories to illustrate each situation. Most treatments involve an integrated approach of diet, exercise, herbal medicine, vitamin and mineral supplements. There is a chapter on recommended herbs and their uses, and brief explanations of other natural therapies. This is not intended to replace conventional medicine but to allow people to take an active part in their own health care.

P/b, 167 pp, Aust, Greenhouse Publications. Distributed by Macmillan Aust. RRP \$19.95.

A SMALL PLACE IN THE COUNTRY — Toni Mackenzie.

This is much more than a description of how one family successfully made the move from city to country living. Subtitled *A Practical Guide to Rural Living in Australia*, this completely revised edition of Toni's very popular book is full of helpful advice for anyone contemplating the same sort of move, with lots of tips on choosing land to suit your needs, establishing your house and garden, water supply and fire protection, caring for animals — and making a living to finance all this development! As well as personal anecdotes and practical hints on many aspects of rural living, most chapters also include book references and sources of further information on each topic. Very handy for beginners.

P/b, 240 pp, Aust, Pan Books. RRP \$12.95.

BEACH FOR KIDS — Mary Dracup.

Another of the *For Kids* series of small books of information and activities on various subjects, this one is particularly appropriate for this time of year. It encourages children to explore their surroundings, to think about what they see or find and to develop their own skills and knowledge through a range of activities for all ages. There are fascinating snippets of information about the sea and creatures that live there, as well as safety hints and basic first aid practices to ensure that youthful explorers learn to take care of themselves while they have fun.

P/b, 60 pp, Aust, Collins Dove. RRP \$6.95.

A TASTE OF THE TROPICS — Mogens Bay Esbensen.

The wonderful colour photographs in this book are encouragement enough to try cooking with the amazing variety of tropical fruits described here. Each fruit is introduced with an outline of its origins, appearance and taste, then a selection of recipes offer ways of using it in sweet and savoury dishes which all sound delectable. You may find some of the dishes too 'gourmet' for your tastes, but you should be able to substitute somewhat less exotic or expensive ingredients to complement the flavours of the wonderful range of tropical fruits now available in Australia. Inspiration to experiment.

P/b, 156 pp, Aust, Viking O'Neil/Penguin. RRP \$24.95.

SIMPLY SMOCKING — Jenny Bradford.

From long experience in many facets of needlecraft the author has compiled a useful guide to the main techniques and requirements of this increasingly popular craft. The book assumes some basic knowledge of sewing, but gives full details of all the stitches used in the designs described, as well as offering those starting out in smocking helpful hints on selection and preparation of materials. Assembling and finishing methods are covered too, and patterns include both complete garments and easy ways of adding special touches to articles already made. Colour photographs of the designs show just how effectively they can be used to brighten up your sewing.

P/b, 70 pp, Aust, Greenhouse Publications. Distributed by Macmillan. RRP \$8.95.

LIVESTOCK BEHAVIOUR — C Dalton & R Kilgour.

This book, designed for those practising or studying in areas of agriculture and animal care, attempts to strike a balance between concern for animal welfare and economic return from livestock production. It is intended more for the large scale producer than for the small farmer, but there is a good deal of useful information on aspects of animal behaviour that will be relevant to anyone involved in raising cattle, sheep, goats, pigs or poultry, as well as for those working with deer or dogs. The approach is a scientific one but research findings are expressed in language that should be readily understood by anyone at all familiar with the animals discussed. Each chapter is followed by an extensive list of references and a series of appendices at the end give sources of further reading and research guidelines, as well as detailed indexes of both subjects and authors.

P/b, 320 pp, Aust, NSW University Press. Distributed by Second Back Row Press. RRP \$21.95.

GROWING TREES FOR FARMS, PARKS AND ROADSIDES — Julianne Venning.

A well researched and clearly presented manual for the revegetation of rural Australia, this book should be of great usefulness for anyone considering a tree planting project of whatever size, from small clumps around a house to large scale reforestation. Contents cover the basics of planning your project, selecting and collecting the seed, preparing the site and after care. Several different tree planting techniques are discussed, with comparative case studies to help you choose the best method for a particular situation. Considerable emphasis is placed on the use of chemical insecticides and herbicides, though other means of control are also mentioned. A useful handbook, with extensive notes, species list and index.

P/b, 126 pp, Aust, Lothian Books. RRP \$19.95.

SO, YOU WANT TO BE IN BUSINESS! — Lloyd M Callard.

A highly readable guide to the pleasures and pitfalls of setting up or buying your own business, this is much more than a dry list of do's and don'ts. The prospective business proprietor is taken step-by-step through the various stages of selection, establishment and further development of a small enterprise, with identification at each point of the factors likely to make or break the business. Each chapter is enlivened by personal stories of success and failure, all designed to illustrate or reinforce the guidelines and warnings presented by the author, who has had long experience in the cut-throat world of commercial competition. The book has much good advice to offer anyone intending to enter this field, and includes checklists of requirements for various types of businesses as well as comprehensive sources of further information and assistance.

P/b, 216 pp, Aust, Real Estate Institute of Australia Ltd. Distributed by Gordon & Gotch, or from state Real Estate Institute shops. RRP \$24.95.

WATER FOR EVERY FARM — P A Yeomans.

This book presents the theory and practice of the Keyline plan, which aims to improve soil structure, fertility and depth. The plan depends on a careful assessment of the geography of a particular area or farm, and includes new cultivation techniques, farm layout, planned tree planting and clearing, water conservation and irrigation. The first section of the book discusses the philosophy of Keyline, with practical examples to demonstrate the ideas presented; the second section is a more detailed explanation of the theory and how to apply it to particular situations, so that farmers will be able to use the ideas to improve their own properties by following the Keyline methods. These theories are not new but recent drought, erosion and soil conservation problems have aroused fresh interest in them.

P/b, 251 pp, Aust, Second Back Row Press, RRP \$9.95.

ROUND THE MARKET PLACE

We hope you enjoy this feature introducing new products relevant to readers' lifestyles and interests.

THE EFEKTO FLY TRAP

The solution to ridding your outside environment of the fly menace is now here. A natural, organic bait containing no poisons is activated when placed in water and attracts flies within 7 m (23 ft) from the trap. This allows you to enjoy your outdoor meals without the menace of flies. The trap has a clear plastic container which enables you to actually see and monitor its effectiveness. You'll be amazed at the volume of flies being caught. The bait comes in dry powder form. Simply add some water to activate the bait and the flies are trapped by the thousands. The trap is supplied with 4 free bait sachets which will last from 4 to 6 months, depending on fly infestation. Extra bait packets containing 4 sachets can be reordered as required. For your nearest supplier contact: **Avond Pty Ltd, Shop 20 Cloisters Square, 865 Hay St, PERTH 6000. Ph: 09-321-4383.**

ALGARID MAGNETIC WATER STABILISERS

Unlike conventional water treatment, these units do not kill algae and bacteria outright, nor do they act as filters or reduce salinity, instead using magnetic water treatment to bring about subtle changes in the water chemistry and reduce the availability of minerals and nutrients so that in treated water, under most circumstances, algae and bacteria are unable to grow and the build-up of mineral deposits is greatly reduced or eliminated. Nothing is added or removed in this process, which is naturally reversible and is therefore not detrimental to stock or crops. Algarid treatment has many applications on farms and in rural communities. For example, fitting a unit in a line supplying water from a bore or dam will control the growth of algae and bacteria in tanks and drinking troughs. The treatment will enhance sedimentation if the treated water passes through a tank or reservoir before it is used. It has also proved effective in reducing bacterial counts in water supplies for households and dairies, and has allowed the use of bore water to be extended. Slime growth (and resultant blockages) can be checked in most kinds of equipment, for example, irrigation equipment in the field or in greenhouses, hydroponics installations, heat exchangers, control valves etc.

Standard Algarid units are available to suit pipe sizes from 40 mm (1½ in) to 200 mm (8 in), allowing treatment of up to 160 l/sec (128,000 gph). Constructed from the highest quality bronze and containing advanced ceramic magnets, the units are easily installed in existing plumbing and will last a lifetime. No power or chemicals are required and, providing it is protected against blockage by large objects, the unit need never be touched while in service. It can also be adapted to fit plumbing smaller than 40 mm (1½ in) size and it is effective even at very low flow rates.

Algarid Pty Ltd, 269 Whitehorse Rd, BALWYN 3103. Ph: 03-830-5044.



Standard 40 mm (1½ in) Algarid magnetic water stabiliser unit.

SEEDLING PROTECTOR

A new biodegradable, non-maintenance seedling protector has been released by International Reforestation Suppliers of Bruthen in Victoria. The protector is currently being trialled in western areas for its effectiveness to deter rabbits/hares, native and domestic livestock. In Yarram, Victoria the device is being tested to see if it may be suitable as an alternative to the use of 1080 poisoning of native animals in commercial tree growing areas. The barrier has been in successful use in North America, according to the firm, for several years now and its low cost (10¢ retail) and fast application (1000 to 3000 per day) should make it commercially acceptable in Australia.

International Reforestation Suppliers. Ph: 051-575-562.

POWER CONTROL UNIT

The Powermakers control unit is a complete power control unit which handles many functions. It takes power from a generator (or any other power source) to charge batteries. As power is needed, it takes DC power from the batteries and turns it into AC power for all household appliances. The generator is run only when the batteries need charging. The rest of the time it is turned off. Because the batteries are always kept charged power is always available. Because the generator is properly loaded when it is going, enough power can generally be produced during a run time of 3 or 4 hours per day to supply electricity to a household for 24 hours. The state of the art electronics make it possible to combine diesel generators (or any other power source) which has not been possible before. Solar panels, wind generators and other renewable energy sources can be used as power sources and may be added on later without requiring any alterations to the equipment. The extremely high efficiency of the unit means that less fossil fuel is used to provide the same amount of power at a cost of up to 40 percent less than a diesel generator.

Batteries are a necessary part of any solar or wind system. By storing the surplus electricity able to be produced by diesel and petrol generators, batteries can save large amounts of fuel. The key to any system based on batteries is the efficiency with which useable electricity can be retrieved from them. In a household electrical system the average electrical demand is usually around 10-20 percent of the peak demand. At this average loading traditional inverters are very inefficient (around 50 percent whatever efficiency is claimed for them at higher load levels). Up to the minute electronics and a battery bank with the same voltage as the load (240V) do away with the need for transformer inverters. Powermakers' modern electronics are 96 percent efficient at converting DC power into AC power.

In addition to making the bigger systems which are designed to help outback homesteads and communities, Powermakers have been reducing the size of their units so that they can be used to power ordinary homes, and units now range in size from 3.3 kW to 50 kW.

Powermakers, PO Box 1083, FYSHWICK 2609. Ph: 062-391-015.

TRAVEL CALM GINGER TABLETS

There is now a natural way of overcoming the problem of motion sickness. The therapeutic benefits of ginger on the digestive system have been appreciated over the centuries and recent chemical studies have shown its advantages over synthetic anti-nauseant drugs. Unlike synthetic drugs which act upon the central nervous system, the action of natural ginger appears restricted to the gastrointestinal tract. This accounts for the lack of drowsiness when ginger is taken for motion sickness, unlike some synthetic drugs which can sedate and are not recommended for drivers. Blackmores Travel Calm Ginger Tablets each contain 400 mg of powdered ginger root, are blister packed into trays of 15 tablets and cartoned with 3 trays per carton. Each carton retails for \$5.00 and includes an informative leaflet giving travel hints.

Blackmores Laboratories, Sydney. Available from health food stores stocking Blackmores products.

GRASSIFIEDS

PROPERTY FOR SALE

NEW SOUTH WALES

LAND — 2 ACRES RAINFOREST near Nimbin, habitable roomy timber cabin, plumbed springwater, housesite cleared, 12 volt TV/cassette, 5 KVA generator, chainsaw, mowers, building materials. \$30,000 inclusive. Ph: Chris 02-953-5223.

KEMPSEY ½ hr nth Kempsey, 95 acres, borders state forest, 20 mins beaches, fenced, 2 dams, shed, cattle ramp, tractor, slasher, ½ cleared, usable timber, power on boundary \$62,000. M Gattenhof, 10 Alleena Dr, TOORMINA 2452. Ph: 065-627-850.

SECLUDED FARMLET 100 ac southern tablelands, 2 hrs Sydney, 30 ac cleared, remainder natural forest, ½ km perm creek, quality fencing, cottage with phone, S/C stove, heater, HWS, septic, own power, permit to build, irrigated organic gardens, good business potential or ideal alt lifestyle. \$100,000 neg. Ph: 048-485-246.

CLARENCE VALLEY 70 ACRES — Coutts Crossing 30 mins from Grafton, 3B/R house, solar hot water, septic, electricity, beautiful rural outlook, 4 dams, 4 hingelock fenced paddocks (60 ac), sheds, race, suitable for goats or sheep, suit person seeking peace and calm. \$158,000. Ph: 066-493-104.

WELL EST 2B/R HOME on 3.5 ac, power, phone, pumps supplying 3 tanks. River frontage, with sealed roads, only 10 km from Tamworth, Lge courtyard & lovely valley views, carport, air-cond, S/C heating, no chemicals for two generations. Ph: 066-538-533.

COONABARABRAN — 300 ac set into the Warrumbungle Ranges, perm spring, 5000 gal tank, semi-perm creek, small mudbrick cottage, fuel stove, garden shed, bathrm, laundry/toilet (self-composting), young orchard, est garden, 2 small paddocks, 50 ac clear, other timbered, hilly & beautiful, no electricity, sch bus. Write: PO Box 373, COONABARABRAN 2357. Ph: 068-421-950 after 10 pm.

100 ACRES SE GLEN INNES 18 km to PO, store, pub. Untouched bushland, good access, phone, power 800 m from block, 1000 mm rainfall, good soil, ideal for botanist, seed collectors of native flora, banksias, grevilleas, much more. \$23,000. Ph: 067-333-265.

SOUTHERN NSW 28 km to Grafton, 20 ac rainforest, river flats, s/c bathrm, power and phone connected. 5000 gal concrete river rainwater tank. \$55,000. Ph: 066-470-000.

200 ACRES MID-NORTH COAST — Nambucca Valley, 2 creeks, perm water, state forest 3 sides, 4 dams, ¼ cleared, beautiful views, 2 rm shack, gas/solar, septic, sch bus. \$80,000 ONO. Ph: 065-647-497 or 065-644-037.

UPPER HUNTER secluded 10 ac, dam, 2 creeks, power connected. Phone, town water avail, orchard, shed, 2 caravans. \$45,000. A Rutter, C/- PO, CLARENCE TOWN 2321.

GRAWIN OPAL FIELDS — consider an alt lifestyle with bonus of an income. Everything complete WIWO — home, vehicles, mining/cutting equipment. Details: B Parker, GRAWIN via WALGETT 2832.

COFFS HARBOUR 6 km from beach, 2 yo furnished house on 9 acres, rural view, good income from established blueberry bushes. Packing-shed, coolroom & tractor, ideal active retirement or farm management avail if required. \$150,000. Ph: 066-492-907.

NTH NSW, TOMEWIN, via Murwillumbah, 1/15th share council approved M.O. (5 ac), house site, dam, rainforest, 4 WD preferable, beautiful area. \$25,000 ONO. Ph: 066-849-165 or 066-888-325, Charmaine.

CENTRAL NSW TOTTENHAM, 3 subdivided blocks rate as one, easy to convert to 3 titles — 198 x 161 ft — ¾ ac cleared, level, 20 x 20 tin framed shed, concrete flr, septic WC, close schools, bowling, golf clubs, squash courts, pool, shops, hospital. Water, elect connected, sewer avail. Suitable private use. \$20,000 ONO. Ph: 049-711-149 after 6 pm.

HUNTER VALLEY 6 arable ac of sandy Wollombi Brook frontage. Suit weekender. \$24,000. Ph: 07-254-1045.

86 ACRES Tweed Valley, magnificent mountain views, rainforest gullies, spring fed perm creeks and dams. 15 mins Murwillumbah, 20 mins coast, yet secluded, never flooded in. Lovely 40 x 25 ft mudbrick building. \$109,000 ONO. Solar setup optional. Tom Pearce, Blakeney's Rd, STOKERS SIDING 2484.

DRAKE NTH NSW, 240 ac, well forested, steep sloped with creek flats, perm creek, 3 dams, 1 large. Some fencing, some fruit trees, levelled housesite, 34 x 27 ft pole constructed shed, (could be a dwelling), mud and timber dwelling 20 x 25 ft with loft, phone. Access to school bus, all weather access, negotiable by 2WD, better with 4WD. Ph: 067-376-701.

PILLIGA NSW beautiful old renovated 30 sq colonial home on ¼ ac block. Open fire, 4B/R, sunrooms, polished floors, huge organic garden, fruit trees and large number of native trees. Garage, shed, large feed shed and stable with loft. Home opposite lagoon with abundant fish and wildlife. Situated in sleepy rural village with ample employment. Price \$42,500. Phone owners AH 067-9642 ext 69.

BARRINGTON TOPS AREA, 300 ac virgin forest, perm water, rock pools, waterfalls. Part rainforest, many species ferns. 4WD access, abundant wildlife, 3 boundaries state forest, unlimited potential, very reluctant sale. \$55,000. Ph: Adam 02-882-352.

HOUSE, 20 ac bush, school bus, ½ hour beach, town. \$50,000. Ph: 066-448-316.

QUEENSLAND

15.22 HA, lge dam, house yard, 15 ft caravan, 2B/R dwelling, kit, lounge rm, gas fridge, wood stove, 20 min from town, for quick sale. \$16,500 ONO. W B Johnston, PO Box 193, TARA 4421.

GYMPIE — 57 ACRES f/hold hilly bushland, small A-frame house, state forest 3 sides, phone, concrete tank, wood stove, hot water, perm dam, 11 km sth of Gympie. \$65,000. Ph: 02-699-4249.

16.8 AC OF TROPICAL FRUIT farm land in Whitsunday/Mackay area, cleared, fenced, shed and tractor. \$57,000 ONO. Ph: 079-590-211.

**DEADLINES: GR 71 — FEBRUARY 21 ST
GR 72 — APRIL 21 ST**

30 MINS TO MARYBOROUGH, 130 ac of secluded natural bushland, fully fenced, 2 dams, nth border a freshwater crk with weir. Power soon to be supplied, phone avail. \$75,000 neg. Ph: 071-826-492. Calvin & Debbie Hannam, 61 Deans Rd, The Palms via GYMPIE 4570.

MT SYLVIA build your own home with your own timber, this 52 ac farm is the hermit's delight set in rugged mountain country with 2 crks and black soil, tranquility is yours here at \$500 per ac. Ph: 071-851-749 after 6 pm.

SPRAY FREE CORINGA HILLS 10 ac. Mostly cleared, seasonal creek, dam, power inexpensive if required, bitumen road, schools handy, 20 kms to town. \$17,000. Ph: 071-720-575.

378 AC COMPLETELY CHEMICAL FREE. 70 ac cultivation, 300 ac saleable timber. 5 ac arrowroot, 100 fruit trees, 300 lavender bushes, crop of garlic, 26 sow piggery, 30 x 16 ft shed, stockyards, 2 dams. Caterpillar D4 with blade. International 624 diesel tractor, list of machinery. 2B/R wooden house, garage, town water, power, phone, 9 miles town and rail. \$125,000. E Salmon, Gayndah Rd, HIVESVILLE 4612. Ph: 071-689-392.

SECLUDED 11 AC SHARE. Many Slopes near Miriam Vale. Heavily timbered. Dam and crk water. Small dwelling, 2 large tanks. Phone connected. No SEC. Surrounded by state forest. Rainforest area, abundant wildlife. \$19,000. Ph: 079-745-127 or 079-745-172.

11 AC FARMLET on MacIntyre River Wallangra. 40 miles nth Inverell. Gemfields fitted. 2B/R home fitted for gas lights, stove, fridge, power avail. Steel lockup shed. \$42,000. Ph: 067-791-619 AH.

SE QLD 26 ac, timbered, views, orchard and dam, close to primary school and large town. \$15,000 neg. Ph: 071-865-171.

VICTORIA

GENOA DISTRICT — 36 ac with perm water on long ck frontage, set in secluded valley but close to highway with easy access to coastal resorts, Eden and Mallacoota approx ½ hr, property has good house sites and exc potential for market gardening etc. \$59,000. Ph: 051-588-240.

EXCELLENT PICTURESQUE setting in heart of the Upper Murray (Walwa), comfortable 2B/R home on approx 3 ac, backs onto state forest, power, phone, water, high and primary sch bus pass door, est vegie garden, chook pen and garden sheds, sml country town with necessary facilities, perfect environment to raise happy, healthy kids. \$55,000 ONO. Ph: Carol, 060-371-252.

EAST GIPPSLAND — much hard work has gone into this passive solar mud-brick house (time and energy needed to bring out full potential of the design) sit on 40 ha (100 ac) bush with perm water, 5 ac cleared, beautiful fern gullies, 15 mins to Cape Conran. Sml community, shop, state sch/high sch bus passes, frontage Princes Hwy, in Cabbage Tree Creek, secluded but not remote. \$140,000. Ph: Helen 051-541-788 (BH), 051-581-222 (AH).

TOLMIE 12 AC chalet style 7 yo home, open plan lounge/dining, 2B/R, 2 bathrm, S/C heating, 5000 gal rainwater tank, spring fed dam, bungalow with open fire, glasshouse, sheds, est gardens & berry growing business. \$120,000 ONO. Ph: 057-762-230.

GRASSIFIEDS

VICTORIA

MT RICHMOND 30 km from Portland 3 B/R log cabin with s/out & sheds, windmill & natural soak, 10,000 gal tank. Independent power — generator, inverter & batteries. Gas cooking, HWS & fridge. Telephone. Surrounded by state reserve & pine plantations. Excellent views & very private. Priced to sell, \$105,000. Ph: 055-202-226.

DAYLESFORD AREA, 2 ac adjoining state forest, fenced, dam, caravan, sheds, fruit trees. \$30,000 ONO. PO Box 61, TRENTHAM 3458.

EAST GIPPSLAND, 26 ac bush block, undulating, overlooking valley, approx 2 ac cleared for building, power within 300 m, sealed road frontage, sch bus route, 22 ft Chesney caravan under cover, S/C stove & HWS connected for washing & showers, water tank, dam, perfect oppo for owner builder, 20 mins from Orbst and 20 mins from Lakes Entrance, 10 mins to beach. \$45,000. Contact Ron Gibbings-Johns, 41B Wairewa Rd, WAIREWA 3887.

TASMANIA

MATHINNA NE TAS 3B/R house, shop and freehold petrol outlet, lge double block, shop and adjoining rooms used as a w/shop (private), huge development potential, features too numerous to list, close to all services, a great lifestyle in a beautiful area. \$53,000 plus SAV. Ph: 003-771-160.

NE TASMANIA 3 B/R Weathertex cottage on 2½ ac, phone, power, townwater, lge garage, sheds, sch bus close, land joins state forest. \$29,500. G Williams, C/- PO, PIONEER 7264. Ph: 003-542-381.

52 ACRES in beautiful Jackey's Marsh, 20 mins to Deloraine, 1 hr to Launceston, Devonport, 2-3B/R modern home, solar power HW, S/C stove and 2 heaters, sunrm, lge est garden, fruit trees, 20 ac elec fenced paddocks, balance bush, trout streams, perm gravity water, out-buildings, views, sch nearby. \$65,000. Ph: 003-695-118.

DERBY NE HIGHWAY, well maintained 3B/R W/B home, ¼ ac. Est vegie garden, beautiful views, good trout fishing, river 200 yards away, carpets etc, fireplaces. \$29,000 neg. A Mott, DERBY 7264. Ph: 003-542-265.

GLASSHOUSE NURSERY 12 mins from Hobart, Summerleas Rd, Kingston, 5 glass-houses av. 23 m x 8 m, currently growing tomatoes. Town water, 3 phase power, magnificent rural outlook, all day sun, plus 4B/R comfortable BV house, sch bus etc. \$185,000. Ph: 002-293-683 for photographs.

UPPER ESK 13 ac NE Tas. Sth Esk River frontage, access from sealed road. Power & phone avail. \$16,000 neg. Ph: 003-771-158 or Webster, Tyne River Rd, MATHINNA 7214.

SOUTH AUSTRALIA

I HAVE A 3B/R STONE HOUSE, garage with inspection pit and outbuildings, town water, power and phone plus spare block of land, freehold at Rudall, sch bus to Cleve. \$10,000. Ph: 064-927-204.

**DEADLINES: GR 71 – FEBRUARY 21ST
GR 72 – APRIL 21ST**

COMMUNITIES

MID-NTH COAST — COMBOYNE fifth share of 640 ac. 2 dams, perm ck with swimming holes, 10 mins sch bus, 20 to shops. \$16,000 ONO. Ph: 02-560-3056.

UPPER BELLINGEN VALLEY, twelfth share in 1100 ac unique property bounded by extreme rainforested nat pk, incl near new 3B/R all mod cons house on prime location with view to Dorrigo escarpment, overlooking lge perm ck with unpolluted catchment. \$88,000. Ph: 066-558-636.

SUNSHINE COAST QLD magnificent 12 ac share in 320 ac long est community, chemical free area, beautiful rainforest, rich soil, perm spring fed ck, tanks, pump. Orchard, tropical fruits, citrus, avocados & more. Council approved living rm/kit, separate B/R, 2 lofts, toilet, shower, S/C stove, HW, solar panels, 12V battery 200 amp hr, 240V generator, gas stove. ½ hr major beaches & business centres. Quality share priced for quick sale. \$59,000 not neg. Ph: Peter & Vonnice 071-467-743.

SHARE OF 15 ACRES in a company of 150 ac at the Obi Obi near Mapleton, Qld, forest, cleared land, river frontage. \$10,000. Kiki Magnusson, C/- Grimaitre, MS 16, Gemelle, MALENY 4552.

6 ACRE SHARE — in semi tropical rainforest valley for sale in hinterland of Sunshine Coast, SE Qld. Share includes very comfortable 3-4B/R 2 storey family home with complete (efficient) 24V/240V alternate energy system. Verandahs and lge sundecks, studio/house looks across valley to forestry, est fruit trees and (much loved) gardens. Will send more information and colour photos upon request. \$76,500. Ph: 071-467-903.

TAYLORS ARM RIVER via Macksville, NSW. ½ share 43 ac lush rainforest, perm water, swimming holes. 2B/R timber house. \$35,000. C Jones, 1-3 Warner St, MANUNDA 4870. Ph: 070-311-438.

SMALL COMMUNITY with 5 families on the Bulga Plateau above Taree, NSW, sells 2 shares, 1 for \$13,500 and 1 with old renovated farmhouse for \$20,000. Our beautiful 420 ac incl a lot of forest, cks, swimming holes, pastures and backs onto state forest. We are 16 km out of Elands and 4 km from sch bus. Ph: 065-504-570.

COMBOYNE 587 ACRES 40% rainforest, balance open forest, river, cks, elevated house site, expansive views, good soil, approx 25 ac per share, seventh share remains. \$13,500. Ph: 065-534-028.

WANTED by amiable professional couple, share attractive community/property with high degree privacy and seclusion to about \$15,000 or more if improved, 200 miles Brisbane. Long lease considered. Write: Land, C/- PO Box 764, SHEPPARTON 3630.

ELYSIAN FARM is situated on 240 ac about 20 km NW of LISMORE. Reg as a company, the farm is a legal MO, there are dams, orchards, sml dairy herd, chooks and a vegie garden, the shares for sale are worth \$10,000 ea. Contact: Susan Conroy, 1189 Wynnum Rd, MURARRIE 4172.

WOMEN'S CLUSTER forming in large, established community, mid-nth coastal NSW. Judy, PO Box 48, BONVILLE 2441.

NEW ENGLAND inground dwelling, council approved, overlooking river on alternative lifestyle community. Fully equipped with 12V elec, water pump, tanks, generator for 240V, gas fridge & washing machine. Well estab gardens, good access. Ph: 07-398-8002.

SHARE WANTED. Cruising sailor (37) presently selling yacht to buy share in community as base. Prefer coastal NSW or Sunshine Coast. Environmentalist (graduate), traveller, spiritually aware, down to earth, practical skills. Ideally seeks harmonious community near ocean. Matthew. Ph: 02-958-5795.

DENMARK WA, fifth share. 160 ac. 2 km river frontage to Kent River. approved building site, sheds, dams, \$21,000. J Collier. RMB 1268. DENMARK 6333.

YULUNGA — spiritual community project inspired by 'Course in Miracles' emphasising universal one-ness and spiritual growth. (Creative refocussing and rebirthing taught at Yulunga Centre.) Seeks dedicated members motivated to help establish a healing community. Send SAE to Yulunga, BARKERS VALE 2474. Ph: 066-897-231.

THORA BELLINGEN VALLEY, north coast NSW, twelfth share in an entire valley. 1100 ac of crystal clear streams, rock bottom pools, rainforest, hardwoods, creek flat meadows and tranquillity. Close to Steiner School. \$40,000. Ph: 066-558-550.

PROPERTY WANTED

NATURE LOVING COUPLE with \$50,000 require acs with small home (pref with power, septic, w/tank, dam) in the Bundaberg/Maryborough region. Communities appeal. Peace and privacy paramount. Ph: 071-452-960.

SMALL ACREAGE with livable residence wanted for small family needing to start somewhere. Willing to rent, lease with option to buy after certain period or just caretake with long lease. Good tenants. Work and character refs avail. Ph: 049-814-875 after 7.30 pm anytime.

WE, (EVA & AMBROSIOUS, vegetarian, non-smokers) are looking for a quiet place in NSW or nth NZ with good drinking water, reasonable soil & enough space for gardening. We could afford a share in a community up to \$15,000 — though less would leave us more money for improvements. A place to rent or caretake on a long term will also be considered. Or if you have too much land we lease some off you. We have experience in driving the tractor, landscaping, gardening & general maintenance work. Write to: Eva, Bishops Creek, Darkwood Rd, THORA 2454.

SMALL ACREAGE CENTRAL COAST NSW with dwelling. Contact: Phil Watkins, 26 Brooklands Rd, GLENBROOK 2773. Ph: 047-392-118.

SMALL ACREAGE, house, Nth Rivers area for young family. Is there anyone who wants their beloved farm to go to believers in the earth's health & usefulness, must pass housing co-op. Sandy, PO Box 442, KYOGLE 2474.

LEASE — OPTION to purchase property, well timbered, plenty water, good quality soils to 100 ac. Within 200 mile Perth. Write Bill Hipworth, 20 Findon Cres, PERTH 6061 to arrange inspection.

GRASSIFIEDS

BUSINESS FOR SALE

CRAFT SUPPLIES SHOP Casino, carrying most craft lines etc, good position, low rent, only one in town. Great potential, selling due to other commitments. Stock and fittings only. Ph: 066-622-617 BH. 066-624-577 AH.

HOME BASED business, established gourmet, natural salad dressings selling exceptionally well in Perth. A real winner can earn \$1000 per week. Looking for outlets in Sydney, Melbourne, Brisbane, Adelaide and Tasmania. \$5000. For further information ring 09-383-1682 or write Nature's Cuisine, 95 Broome St, COTTESLOE 6011.

OUR TOURIST BUSINESS has grown too large for what was a working holiday idea 4 years ago. Mind you, supplying reef resorts, Cairns shops and doing markets is fun but we are buying a farm and 'going organic'. Most of the tourist items are specially handcrafted for us in Qld which is a must for overseas visitors now coming in droves. We can phase you in but you need \$50,000 somewhere along the line. It will completely change your life and the income will allow you to enjoy the 3 or 4 days off per week in tropical style. Enquiries GPO Box 2029, CAIRNS 4870.

SOAPBOX STORE CASINO — low rent carrying a large range of cleaning products, soaps, giftware, caneware, much more. Great potential — only one in town. Selling due to other commitments. Stock and fittings only. Ph: 066-622-617 BH. 066-622-624 AH.

MOE WHOLEFOOD INN BYO restaurant, lunches Mon-Fri, plus Thurs-Sat evenings, excellent potential, unique recipes, genuine reason for sale. \$40,000 WIWO. PO Box 163, MOE 3825. Ph: 051-277-020, 056-331-739.

AUCKLAND NEW ZEALAND — well established centre. Therapies including osteopathy, naturopathy, homoeopathy, acupuncture etc. A warm professional atmosphere set in attractive gardens. Price includes premises and practice. Bruce Harper, 40 Titirangi Rd, New Lynn, AUCKLAND NZ.

TO RENT

SECLUDED 2B/R HOUSE (sml) at Springwood, Blue Mts (1½ hrs to Sydney), spectacular views of nat pk, 1 ac, dam and vegie garden, uniquely located close to town but 1 km to neighbours. Phone, elec solar only, gas light, fridge, cooker. HW, no dogs, cats, or smokers please. Avail about July, rent neg. Peter or Amanda Ph: 047-515-280 or 28 Adeline St, FAULCONBRIDGE 2776.

TO SHARE HOUSE NE VIC — 2B/R new cedar home, w/o SEC in beautiful Kiwua Valley, 4 kms from town. \$30 pw. Single mother preferred who is alternative person, no cats please. Peter Ph: 057-572-936.

EXCHANGES

CARAVAN 36 x 8 ft with 27 x 10 ft aluminium annexe plus International 2 tonne truck, as part swap on acreage (5 ac plus) with sml dwelling up to \$30,000 in nth Tas. For more details write to R Kedzia, RMB 6270, Dutton Way, PORTLAND 3305.

DEADLINES: GR 71 — FEBRUARY 21ST
GR 72 — APRIL 21ST

COURSES

WICCAN HOME STUDIES and Australian Aromatherapists Association correspondence courses, certificate and diploma. Aromatherapy and post graduate aromatherapy, safety and security, psychic self development, psychic healing, Wicca. Past life or predictive readings on tape by mail. Free brochure of study choice, or applications for AAA membership. Clair and Simon Lorde, PO Box 80, LANE COVE 2066. Ph: 02-699-6166.

CANCER SUPPORT and lifestyle improvement for all who seek health in mind, body and spirit. Mobilise your untapped potential for healing and sustained wellbeing. Comprehensive programme of positive thinking, food awareness, meditation and stress management. Introductory and longterm programmes, non-profit organisation. The Melbourne Living Centre, 360 Mont Albert Rd, MONT ALBERT 3127. Ph: 03-890-2209.

PERMACULTURE — introduction and designer courses held at Australian School Applied Permaculture Taree. For information contact Lee Everingham, Diamond Waters, C/P DUNBOGAN 2443. Ph: 065-598-807.

ANYONE INTERESTED in learning about osteopathy Sydney area, please contact Cheryl. Ph: 02-809-6105.

SCHOOL OF APPLIED PERMACULTURE, Taree, NSW. Intro courses t/out '89. 32 hours tuition over 2 weekends of your choice. Residential with exper. and qual. tutors plus field trip. Total cost \$300. PO Box 684, TAREE 2430 or Ph: 065-598-807.

SERVICES OFFERED

YOUR OWN BUSINESS. Become independent with additional income or a full time business. For details SAE to B Cox, PO Box 624, IPSWICH 4305.

KWIK KERB — your own business, amazing profitability! Earns \$110 plus hourly, includes exciting national company image plus equipment and merchandising. Landscape edging system, very high demand. Ph: 03-241-4615, 03-471-0507 AH or toll free 008-338-407. Ask for Phil Buckland. Total purchase price \$10,895.

INTERNATIONALLY RENOWNED Romany medium, clairvoyant, tarot, psychometry, herbal remedies, past life therapy, any problems you may have. Please supply your date of birth. Satisfaction assured, taped reply. Send A\$30 to Maggie Armstrong, Te Wai Marama, PO Box 311, THAMES, NTH ISLE, NZ.

HAVE YOUR HOROSCOPE done. Just out, approx. 25 pages Computer Interpretation written in a clear style. It will tell you issues that are part of your life and give helpful advice. What you do in life is up to you — good start is cheque/MO for \$25 payable to Othmar, 30 Dunstan Rd, AVONSLEIGH 3782, together with your date, place and time of birth and your name and address.

OUTLOOK ALTERNATIVES have moved to 52 Faithfull St in Wangaratta. Outlook Alternatives specialise in central heating, solar hot water, solar electricity, wood fired heaters, and energy efficient house design. Ph: 057-219-900.

I AM AUSTRALIAN, female, thoughtful, 32, experienced traveller, attracting employment as a travelling overseas companion available now. Please write to Lynda Mae Gullock, C/- Poste Restante, PO, BALACLAVA 3183.

WANTED

YOUNG GUY awaiting parole needs chance for new start — work and place to stay SE Qld. Paul Vanderplas, PMB 1, WOODFORD 4514.

YOUNG GUY, good natured, caring, high moral standards. Looking for boarding accommodation or share accommodation with a person of good qualities in the Sydney area from May 1989. David, C/- PO Box 764, SHEPPARTON 3630.

MOTHER AND 10 yo daughter looking for cottage in Ballina from 2/89 while mate builds. Interested in permaculture. Reply L Wills, C/- PO, PALM BEACH 2108.

NEWCASTLE NSW AREA. Married couple require house with some land to rent/caretake, with possible view to purchase. Tighe, PO Box 869, DANDENONG 3175 or C/- PO, NEWCASTLE 2300.

DISTRIBUTOR for cassettes of beautiful, relaxing music played on zither and guitar. Contact the Lyrebird School of Music, 63 Morrie Cres, NTH BLACKBURN 3130. Ph: 03-898-8950.

SHAREFARMING/CARETAKING — my wish is to grow vegies organically (maybe biodynamically) to sell at the local markets. As my capital is limited I'm seeking an arrangement involving share farming, or use of a couple of acres (with water) in exchange for a day or so's work or for caretaking. I'm a hard working male in my forties, not into drugs, a slight preference for coastal regions, eg nth NSW or Qld. However the key factor is to find the right people, wherever they may be for an ordinary yet alternative person to work together with. All I seek is a happy situation with relaxed friendly people commencing early in 1989. Barwon Johnston, PO Box 98, GYMPIE 4570.

CARETAKER(S) WANTED — alternative lifestyle bushland property near Sydney, rent free, interest in garden, animals, craft, simple lifestyle, suit young couple or singles willing to share. Write to Ted Trainer, C/- Education, University of NSW, KENSINGTON 2033.

COMPANION/BABYSITTER to help single parent with child, own transport essential, caravan advantage, occasional babysitting in return free rent on sml goat stud, peaceful country setting on river near Gladstone, scope follow own interests, assist with work occasionally. Ph: 079-741-285 AH.

HOME BIRTH — is there a group or community who have a demand for registered midwife, wanting to est homebirth practice? No demand here. Partner horticulturist, have children. B Manning, 78 Sutton St, ECHUCA 3564.

40 YO HONEST down to earth male offers free board to 30-45 yo dog and animal loving lady, in return for light housekeeping on semi self-sufficient rural five acres. Keith Thompson, PO Box 210, LARA 3212. Ph: 052-822-594.

WANTED — HOUSE PLANS & forms for rammed earth home, plans must be appropriate to submit to local council. Contact: Carmen Johns, 41B Wairewa Rd, WAIREWA 3887.

GRASSIFIEDS

WANTED

IS ANYONE INTERESTED in milking sheep/goats on a sharefarming or similar basis in WA? I'm female, 30, enthusiastic and experienced in dairying, without land or enough capital to do this alone. Please write: J McGrath, C/- Coolup Store, COOLUP 6214.

NATIVE PLANT MATERIALS — wattle blossom, gum nuts, etc. All types, fully dried, native materials considered. Large quantities preferred. Good prices plus freight paid. Contact: Peter Hunt, PO Box 53, NORTHCOTE 3070. Ph: 03-482-2677.

EX-SERVICEMAN SEEKS LAND nth NSW to run a few head of stock, farm organically, perm water, possibly power, to \$25,000 cash. Charles Mole, 120 Mooroondu Rd, THORNESIDE 4158. Ph: 07-207-1214.

QUIET PRIVATE SITE for lge caravan for family of 4 for a few months from March 1989. Willing to pay rent or work (no caravan parks please) within ½ hr drive of Devonport. Write: R. Kedzia, RMB 6270, Dutton Way, PORTLAND 3305.

OPPORTUNITIES

WOULD YOU LIKE your own market stall but are unsure of what to sell? Would you like to sell a quality product? Have you creativity and imagination? We are a small soap manufacturing business in Tasmania and we can offer a good price on unpackaged soap. The soap is handmade, and high quality, containing no animal products. Write to GPO Box 929, HOBART 7001, or Ph: 002-311-454.

YOUR OWN BUSINESS, become independent with additional income or a full time business. For details send SAE to B Cox, PO Box 624, IPSWICH 4305.

WOULD YOU LIKE your own business? Send long SASE to The Manager, Aberac P/L, PO Box 654, NARRABRI 2390.

I'M INTERESTED to start a business. Looking for person to join as partner. Must be willing to work. Small 4x4 truck and money would help but not necessary. M Tree, C/- PO Box 709, GRAFTON 2460.

MISCELLANEOUS

GRASS ROOTS 53 COPIES incl No. 1, \$90. John Menzies, Hampden Crt, BARWON HEADS 3227 or Ph: 052-543-131.

COLLECTORS ITEM — complete set of Grass Roots — No. 1 (April-June '73) through to No. 43 (June '84), very good cond. \$120 ONO. Maldon Neighbourhood Playgroup. Contact: Pam Pegler, 7 Chapel St, MALDON 3463 or Ph: 054-752-785.

LUFFAS lge clean \$2.90 incl p & p, minimum order 6. Wholesale enquiries welcome. Lynda Thrussell, Gate Rd, GOOMBOORIAN 4570. Ph: 071-833-804.

WOMAN 30 YO wants family preferably, anywhere in NSW who need a helping hand on property in bush area, in return for board and small pay (negotiable). I'm a handy person and take on/learn anything. No drugs, like music, reading, Vispassana meditation, carpentry, building, driving and working on cars. Details if necessary in further contact. Please write to Ruth Walker, 307 Katoomba St, KATOOMBA 2780.

CERAMIC OCARINAS for sale. Beautiful handmade wind instruments for all ages. Seed pod shaped with lovely carved design. Comes with instructions and music. \$14.95 each (incl p & p). Prompt delivery. Send cheque or money order to B K Niven, C/- PO, PORT FAIRY 3284.

SOLAR PANELS — DISCOUNT — top brand for domestic use, 44 watt \$400. 58 watt \$520. Quantity discount also avail. S & S, C/- PO, ASHGROVE 4060. Ph: 07-366-1059.

HACKSAW MACHINE elec single phase 38 in long, 11 in blade, old style, smooth running, \$450. Ph: 03-830-4438 CANTERBURY 3126.

REVERSE OSMOSIS water filters, remove chlorine, fluorine, bacteria, viruses and many other contaminants. Gillian Summerbell, PO Box 1519, HORNSBY 2077. Ph: 02-477-2838.

EARTHWORM SPECIAL. Only \$11.50 for 1000 plus \$1.50 p & p or \$7 for 500 plus \$1.50 p & p. Always generous overcount plus full instructions. Offer for 2 months only. 'The Big Worm', PO Box 149, 42 Redhead St, DOOLANDELLA 4077. Ph: 07-372-6267.

CHIP HEATERS. No electricity needed for instant hot water, operates from town or tank water supply. \$135 including packing and postage 'Heaters', 358 Centenary St, ALBURY 2640. Ph: 060-215-469.

SAVE AND DO it the Quick Brick way. Quick Paver, Quick Brick, Quick Form (in situ block maker) and Quick Ram (earth block machine, Cinva ram type). The fastest & easiest machines available in Australia. Send SAE for brochures to Quick Brick, PO Box 627R, GYMPIE 4570 or phone 071-827-099 anytime. You can do it yourself the Quick Brick way.

SPECIAL REDUCED RATES. 1 kg net weight of mixed size worms (approximately 4000 worms) for \$35 including freight NSW. \$4 extra interstate. For gardeners, fishing-bait and aquarium food. We will not be beaten on price or quality on any order large or small. Enquiries to Wormborough Farm, PO Box 794, TAREE 2430. Ph: 065-539-633.

BLUE DAZZLER torch/searchlight. Powerful 30 watt beam and heavy duty battery rechargeable with ordinary 12 volt charger. Direct from factory price \$75 each. G B Douglas, PO Box 215, WHITSUNDAY 4802. Ph: 079-466-738.

MEDITATE on the inner Light and Sound and transcend body consciousness under the guidance and protection of Master Sant Darshan Singh. True spirituality is a gift from God and is given free of charge. For further information please contact Sawan Kirpal Ruhani Mission, 63 Morrie Cres, NTH BLACKBURN 3130. Ph: 03-898-8950.

MAIL ORDER medical supplies. Price list available from PO Box 83, INGLEWOOD 6052.

CLUBS AND SOCIETIES

JOIN AUSTRALIA'S LARGEST garden club. Members receive quarterly magazine, free seeds, access to extensive cassette lending library. Write to The Secretary, PO Box 110, MAPLETON 4560.

HOLIDAYS

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'AISLINN ORGANICS' (member ORGAV) specialise in organic, open pollinated, non-hybrid vegetable seedlings and wholesale vegetables. Herbs coming soon. Orders taken, small or large quantities. Growers let us raise your seedlings for you. If you have vegetables or fruit for sale we would love to hear from you. Ph: Jackie or Clive 059-643-921.

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GRASSIFIEDS

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PUBLICATIONS

HEALTHY PACKED LUNCHES follows popular Little Red Lunch Book, variety and healthy lunches. Money order \$8.00 Heather Pitt, PO Box 207, MUDGE 2850.

OATBRAN MUFFINS quick mix recipes. Proved to reduce high cholesterol. Healthy high fibre diet food. Send money order \$8.00. Joan Mackie, 42 Mayne St, GULGONG 2852.

'COOKING WITH LOVE' Wholefoods for healthy babies and children, by Christine Hepworth. 52 pages. Recipes using wholegrains, vegetables, soyfoods (tofu, miso, soymilk), fruit. All natural, no sugar etc. Information on pregnancy, breast-feeding, weaning. Available from author: PO Box 69, LAWSON 2783. \$5 post paid.

A PRACTICAL GUIDE to handling and training a donkey — for novice and experienced donkey owners to obtain best results. Avail from author Wendy Mayer for \$9.98 Aust. \$10.98 NZ post paid. PO Box 559, MT BARKER 5251.

TURKEY TALK — a quarterly newsletter for the small-scale turkey breeder and pure breeds fancier. Authoritative and up-to-date information on all aspects of turkey breeding and raising, letters, book reviews and recipes. Subscription \$12.00 per year. First 1989 issue now available from Night Owl Publishers, PO Box 764, SHEPPARTON 3630.

SISTERSHIP is a magazine for women concerned with maritime issues, intended to inform, entertain and inspire with technical advice, scientific data, news, legal and professional notes and personal experiences. Subscription (6 issues p.a.): Aust \$25, NZ A\$30, O/S A\$35.

SEND YOUR DREAMS and order your copy of Dream International Quarterly. Essays about dreaming too. Single copy \$5.50 or 4 issues \$18.75. Les Jones, World Editor, 1-17-7 Ushita Waseda, Higashi-Ku, HIROSHIMA 732 JAPAN.

A MISCELLANEOUS LIST of out of print and fine used books on Australian, biography, cinema, literature, etc. Write: Robert Warburton, Box 386, HILLARYS 6025.

COMMUNITY ACCESS IS PRINTED — finally the latest Alternative Communities Directory containing names and details of 25 intentional communities open to visitors and new members. Helpful hints on finding and approaching a community. Produced in conjunction with DTE Nth East Aust. and the Australian Association of Sustainable Communities. \$1.20 incl postage from Robin Goodfellow, Communities Access, Box 341, SPRING HILL 4004.

THE GOATKEEPER'S MAGAZINE for all the latest industry news. Covers dairy, fleece and meat. \$20 per annum (6 issues). Write to TGM, PO Box 232, INVERELL 2360. Bankcard welcome.

IMAGINE! (formerly Maggie's Farm) alternative network magazine. A unique experiment in access press run by a volunteer collective as a regular news service linking many citizen initiative groups and networks world-wide. Planet earth news, hues and views. Eco-action, health & healing, new technology, psychic reality and communal lifestyles. 4 issue sub \$12. Imagine, PO Box 151, LAWSON 2783. Ph: 047-514-846, adv. 02-728-4591.

'MONEY FOR WOMEN' Practical down-to-earth book on how to invest. Insights into what prevents women from becoming financially independent, strategies on overcoming obstacles. Aimed at women — useful for men too! \$7.00 (incl postage). Quintessential Press, GPO Box 1143, CANBERRA 2601.

FREE EARTHWORMS benefits leaflet upon request. Includes prices and castings benefits. **THE BIG WORM**, PO Box 149, 42 Redhead St, DOOLANDELLA 4077. Ph: 07-372-6267.

TEXTILE-FIBRE FORUM is the tri-annual colour magazine of the textile arts for Australia. Subscriptions in 1988 are \$15.50 which includes membership in The Australian Forum for Textile Arts (two-year subscriptions are \$30). Sample copy of the magazine is \$5, postpaid. Send to AFTA, PO Box 77, University of Qld, ST LUCIA 4067. Make cheques payable to AFTA. Good information on how to make things is included.

DONKEY SOCIETY of Australia, for information on magazine subscription, publications, books and the care of donkeys. Contact federal secretary, M M Smith, 'Warrawurra', Bushells Ridge Rd, WYEE 2259.

DEADLINES: GR 71 — FEBRUARY 21ST
GR 72 — APRIL 21ST

ANIMAL FRIENDS, quarterly, the magazine for all who love animals. If you share your life with an animal friend this is the magazine for you. Regular features include veterinary column, book reviews, young people's page, lively letter pages plus factual and entertaining features. Animal Friends is only \$6 a year. Animal Friends, 40 Northam Rd, EAST BENTLEIGH 3165.

NEXUS NEW TIMES Magazine is an independent publication bringing you the essential facts behind today's news. We describe new ways of living which improve your mental and physical health and enable you to thrive in the late 20th century. Take part in positive change — subscribe now! \$12 per year. NEXUS New Times, PO Box A556, SYDNEY SOUTH 2000.

ORGANIC GROWING a quarterly magazine about growing food the natural way. Gives you practical ideas for organic gardening, farming, livestock and related subjects. Available at newsagents (\$2) or by annual subscription \$10 Australia or \$12 overseas. PO Box 228, ULVERSTONE 7315.

AUSTRALASIAN HEALTH and Healing — journal of alternative medicine, Australia's major health care quarterly, emphasising self healing and prevention of illness through measures which raise body defences. Sold at most newsagents and health stores \$3.50 each, and by subscription \$12.50 per four issues (1 year), \$23 eight issues (2 years). Write Australasian Health and Healing, 29 Terrace St, KINGSCLIFF 2487.

AUSTRALASIAN SURVIVOR The magazine that prepares its readers for the fast coming hard times. \$2 for sample. PO Box 11, DICKSON 2602.

CONTACTS

TAUREAN MAN 30, average looks, fair, living in rented country cottage. Interests include gardening, cooking, astrology, tarot, hot baths, open fires, good company, endless star filled night skies, fishing, bush, health, working, sharing life. Seeking a loving caring mature woman who enjoys the meaningful things in life. Please write Trevor, PO Box 662, LAVINGTON 2641.

ATTRACTIVE intelligent male 31 yo, 6 ft, slim, blue eyes, brown hair, moustache, living north coast NSW. Enjoys doing almost anything, beach, movies, fishing, night out and home life, loves animals, own home on 3 acres, seeking slim attractive lady 18 to 35 yrs from any area who would like to settle down in the country by the seaside. Write Geoff, C/- Box 764, SHEPPARTON 3630.

FEMALE TRAVELLING companion wanted 25-35 for round Australia trip in 4WD leaving April/May. Stevan Kilgour, 32 McIntyre St, BURWOOD 3125.

LIBRA MALE, non-smoker, drinker lives in peaceful country area, loves oldtime dancing, music, arts, astronomy, camping and gardening, is self employed. Would like to meet lady to 42 years. Write or phone The Advertiser, PO Box 21, WILLOWS GEMFIELDS 4702. Ph: 079-855-142.

INTRODUCTIONS, soulmates, friends, understanding help. Full details, SAE, 'Consultus', PO Box 105, CLONCURRY 4824.

CONTACTS

ATTRACTIVE intelligent male 6 ft, med build, smoker, enjoys health, beach, gardening, fishing. General handyman, experienced masseur, seeks communal lifestyle anywhere. Can anyone help? Geoff, 706/22 Dorris St, NTH SYDNEY 2060.

WOMYN SPIRITUAL vegetarian, NS/ND environmentalist. Interests natural healing, animals, oceans and their treasures, solitude, music, books. Seeks friendship with anyone — especially wommin on similar journey. Ali, C/- Box 764, SHEPPARTON 3630.

HELLO! I'm an outgoing male 33 yo who would like to meet a woman living in Brisbane to share my thoughts and feelings with. I'm self employed, intellectual, enjoy outdoors. Please write to Waleed, 34 Yardley Ave, ASHGROVE 4060. Ph: 07-366-3022

CANCERIAN MALE 37, 5'10", vegetarian, non-smoker, with bantams, vegies, herbs etc on ¼ acre block; enjoys bike riding, bushwalking, quiet life. Seeks compatible female for companionship. A Rivers, 156 Humffray St, BALLARAT 3350.

GAY LAWSON LADY in Blue Mountains, own home needs like company 40's 60, gets depressed being so alone. Please write **A.L.A. Edith, C/- PO Box 764, SHEPPARTON 3630.**

CARING, SENSITIVE shy 32 yo male, has many varied interests, seeks romantic, feminine open minded lady for permanent relationship, age open, child(ren) OK, please include phone number if possible, all replies will be answered. Kevin, C/- PO Box 702, GRAFTON 2460.

33 YEARS OLD, 184 cm, slim, blond, loving, cuddlesome adventurous guy is looking for a nice lady under 30 who wants to share realising the dream of living in harmony with nature at a divine place with clear perm ck, rainforest, garden, inspirations etc. It's the deepest bush here, but beaches, sml culturewise busy town and many nice people are nearby. Thomas, C/- PO Box 764. SHEPPARTON, 3630.

SINCERE AFFECTIONATE FEMALE,
31 yo, 167 cm/54 kg, blond hair and green
eyes, European background, vegetarian, practical
and down-to-earth, non-smoker, non-religious.
I particularly enjoy classical music, theatre,
art, literature, nature, conversations and com-
panionship, bushwalking, swimming, would
like to meet intelligent, considerate and sincere
partner to share the good and bad times with,
for a friendship initially with a view to a
permanent relationship. Sabine, C/- 25A Kent
St. KEW 3101.

QUIET, SINCERE, non-smoker, non-drinker, homely, shy 27 yrs vegetarian seeks caring friends. Interests incl natural foods, banana smoothies, yoga, camping, meditation, walking, spirituality, alternative medicine, travelling, growing things and simplicity. Please contact Lindi, C/- PO Box 34, WANNEROO 6065.

WANTED: FRIENDS IN New Zealand — Tricia (32) and Kati (7) are moving there. We want contact with like minded people in an area that has sml creative sch, sea or river, maternity hospital nearby, warm weather (please?), countryside. Tricia — midwife, herb student, interests — rituals, dancing, fabric crafts, bush-walking, water, co-operatives, gardening. Kati — dancing, swimming, dolls, celebrations, plays, acrobatics. Friendly people are the most important thing so please write: Thompson, PO Box 72, MOOLOLAH VALLEY 4553.

GAY WOMAN 47, seeks communication with others in Dural Arcadia areas. Non-smoker, love animals, movies, fishing, bush. Value friendship, not into scene ALA, easy-going, average looks, fair. S Patterson, PO Box 309, ROUND CORNER, DURAL 2158.

NON-SMOKER AHIMSA-VEGETARIAN
bachelor seeks a conscientious fruitarian partner
to study permaculture of African 'high amino
acid' fruits and algorithm-philosophy for optimal
intelligence. Reply Mark, PO Box 36,
KURANDA 4872.

DEADLINES: GR 71 – FEBRUARY 21ST
GR 72 – APRIL 21ST

LONELY WIDOW 64 yrs young seeks compatible male companion to help make life worth living again, well educated, petite figure. brown eyes and silver hair, loves travel and everything interesting. Please write: Advertiser, PO Box 686. COOMA 2630.

SINGLE MALE 34 would like to correspond or meet a nice lady, children okay. Interests are spiritual living, bushwalking, swimming, communicating with people and more. I am very sensitive. Reply Tim, 1/16 Pittwater Rd, **MANLY 2095**.

LATE GRASSIFIEDS

WANTED TO RENT small farmhouse on acres in Nambour area or Sunshine Coast hinterland. Must have by mid Feb. Refs avail. Contact Susan or Will, reverse charges. Ph: 054-286-622.

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and supplies. For free 20 page catalogue write to
Pepperpot, PO Box 416, BORONIA 3155.
Ph: 03-762-9798.

TREES IN NATIVE TUBES — tagasaste, honey locust, hybrid willow, kurrajong, leucaena. \$50 per 42, \$84 per 84 delivered rail NSW, Qld. Send to Col Freeman, Corinda Tree Farm, MONGOGARIE 2470.

MULLUMBIMBY — ORGANIC avocado and banana farm. 16 ac, red soil, approx 500 avocado trees, 3 ha bananas, partly completed house, 2 sheds, Landrover, sundry equip. \$105,000. Ph: 066-874-335 or 066-841-143.

NIMBIN — picturesque 5 ac back on market. Rustic cabin — s/c stove, hot shower/bath, gas fridge/cooker, water pump, rainwater tank. No power, but phone. Verandah overlooks creek with tortoises, platypi, wildlife abounds. Fruit/nut trees, natives, undulating grasslands. \$42,000. Ph: 066-21-8824.

[illegible]

Feedback Link-Up Feedback

Dear Megg and Gang,

Please forgive me not putting in my surname or address, but after a previous letter I put in *Grass Roots* I've had nothing but trouble with 'cranks'. I just can't risk it again.

I've read with much interest all the letters from people trying to MOVE OUT OF THE CITY. This is the way we did it and I thought it may be of help to some of you. Land and houses anywhere near cities or coastal fringes were far too dear for us, so we started to look inland. Of course, it's very different to living on the coast, but if one is fair dinkum about it, you have to live where you can afford. We looked all through the South and North Burnett region in Queensland and finally found a lovely town in the North Burnett area. You may not be aware of it, but there are often old homes in these country areas that farmers don't use and will rent out very cheaply. Our first rented place had a large house yard, shed and small paddock we could use, for only \$20 a week. Yes, it was rough, but not that bad. The roof didn't leak and we were happy and comfy there. It had an outside toilet, which we managed to live with. You see, farmers often own a second property, which they only want for the land, and these second properties very often have houses on them doing nothing. We found, in our area at least, that farmers welcomed having someone live in these houses.

Our next place was in better condition and cost \$40 a week. This place, which we eventually bought, had 5 acres fenced around the house for us to use. All up we got 50 cres, house and sheds for \$40,000. We got the farmer to sub-divide off 50 acres with the house. Not all farmers are willing (or able) to do this but in these bad times they're often prepared to cut off a few acres to get some money for their large loans. One way is to go to the local real estate agents and ask them if they could tell you of any farmers who have second houses, or better still, just drive around and look for old houses and then approach the nearest neighbour for information on who owns it. These farmers don't usually advertise their old places. If you remain well-mannered and are good tenants, you should have some luck. Ours is a friendly town and we were accepted well, with our four children. It's much better than city life, even when we were in the old place with an outside loo! Hope this can help someone. Good luck.

Sue.

Dear Grass Roots People,

Firstly thank you for giving us the inspiration to keep going to achieve our dreams. Each time I feel I may never find my perfect acreage nor get my home built, I reach for *Grass Roots*, read (and reread) Feedback and again nothing seems impossible. I've just moved up to beautiful Maldon from the pressure of Melbourne and although it's not what I want in the long term, it's enabled me to get closer to the things in life I've been longing for — peace, serenity and a feeling of wellbeing I never imagined I'd experience.

Eventually my partner and I plan to buy some land, build a stone or mudbrick home and grow acres of garlic and breed goats, which type I'm not sure. We hope to be as self-sufficient as possible and are taking advantage of our time here to experiment with the garden and the simple things like bread baking. We would love to hear from anyone who can give us the BENEFIT OF their EXPERIENCE in either goats, garlic or home construction, and anyone who can give me hints on bread baking.

Again thanks to you all for allowing us the opportunity to exchange ideas. Peace and harmony to you all.

Lyndal Green
35 Church St
MALDON 3463.

Dear GR Readers,

If you have a WATER SHORTAGE or wish to save on energy heating water, there is a product available that will cut your hot water usage by $\frac{2}{3}$ — the Nova shower head made by Delrana. The shower feels great, best I've ever had and yet my small HWS now does 3 showers, not one. Don't buy cheap copies — the shower quality is inferior to say the least. The Novas are not cheap but will pay for themselves three times over in the first year. I highly recommend them. Ask for the Lopez rose if you have gravity feed hot water. This is the only company that makes a rose that solves all the problems associated with gravity feed. (By the way, I do not work for this company, just wish I'd heard about them years ago!) Save water. Save energy. Hope you all do.

M Ryan
3 Jones St
THIRROUL 2515.

Dear Readers,

I really enjoy your articles in *Grass Roots*. They have such a meaningful (if that's the word) selection. I am a woman of 57 summers (some good, some bad) but I have become sort of bored with the inanities of fashion fads and foolishness expressed in well known women's magazines.

I have always felt that the things that have been handed down from my grandmother to my mother (plus a pinch of commonsense and a large lump of love) seemed to work so much better than the pills and potions doled out by no doubt well meaning doctors to my children. A great many things the younger folk are rediscovering have been around before the beginning of the 20th century. Of course not every major step in MODERN MEDICINE can be discounted, but I have found from being an avid reader of very old books that modern medicine as such has really sprung from a great many of the very earliest of medical discoveries, lost and then rediscovered through research or sometimes lucky accidents, governed perhaps by a higher intelligence setting the wheels in motion. Mouldy bread poultices for one, before the use of penicillin, leeches for another, honey, barks and herbs were in use when I was a girl.

I enjoy all the articles presented and I hope to present some useful information as well in the future.

Margaret Freeman
10 Yugura St
MALUA BAY 2536.

Dear Grass Roots Folk,

I'd like to suggest a book to you all. It's called *BLUEPRINT FOR A GREEN PLANET* by John Seymour and Herbert Girardet, published by Angus and Robertson. This is a book of vital importance to us all. We all know that there are many books telling us that we are destroying this planet. But till now, none have suggested possible solutions and provided methods for halting and reversing the damage. This is one of the new books to which the adage 'every home should have one' truly applies.

Unfortunately this book doesn't seem to have received much publicity so I decided that I'd tell you about it. A book of such relevance should not go unnoticed and its message unheeded. For my baby son, please read *Blueprint for a Green Planet*.

Rohan Ambrosius
PO Box 278
NANANGO 4315.

Dear People,

I live in Fairfield in the Melbourne suburbs. For the moment I accept this situation, as I'm giving part time domestic assistance in exchange for rent in lovely river surroundings. I love veggie gardening, but have no garden space, so will learn more about indoor plants, especially interesting food plants one can grow — ginger, sugarcane etc.

I SMOKE TOBACCO. This is what I would like to ask of GR readers, people who may share my experience. How does one QUIT? It is a seemingly inextricable part of my daily routine (working, cups of tea, reading, pondering, writing, hungry, after a meal, and so on). I also find it a prop to a state of accustomed consciousness. This mind-set, if you understand, I've now realised is my barrier to a fuller, more creative imaginative life, let alone activity. And the habit must be overcome — but how? How does one venture into life unveiled by tobacco smoke, in a gentle way (i.e. I can't cold turkey)?

I'd also like to MEET PEOPLE this side of town (or for that matter via letters) — thoughtful and active people, just for conversation and possible friendship. Incidentally I do have a boyfriend and so am not seeking contact on any other level.

Let us continue to support functionality, beauty and lifefulness above the consumption and display for its own sake that is depleting our world. My regards to you all in your efforts.

Laurel
C/- 41 Valkstone St
EAST BENTLEIGH 3165.

Dear Grass Roots Readers,

Can anyone help with INFORMATION ON A PLANT I have? I grew it from a small cutting obtained from a friend of a friend who didn't know what it was either! It is a succulent plant possibly in the Gesneriaceae family, and has a mid green leaf. I think it has a red flower. The leaves have a strong spicy aroma when touched. I recently saw it in a local nursery labelled 'All Purpose Herb' and thought 'At last I'll find out what it is,' but the nurseryman didn't offer any more information.

Margaret Morters
46 Platypus Rd
BERKELEY VALE 2259.

Feedback Link-Up Feedback

Dear GR Staff and Readers,

I am currently reading GR 70, my second since leaving Sydney and 'going bush'. Our story, being that of my lovely wife Jenny (27) and myself (31), is not unlike that of John and Leah Ford, so I'll tell you that one some other time. We've bought an established 1 7/2 acre property on the south west slopes, with a large brick-veneer home, stables, workshop, grain silo, all the mod-cons and an absolutely magnificent view. We're not vegans, we both smoke, I enjoy a drink but my wife drinks only sparingly due to a medical condition (much to her disgust).

Now that we've more or less settled, I've found time to get back to one of my hobbies — home brewing — which brings me to the reason for this letter. Many of your readers seem to be interested in MAKING MEAD. I possess a little book called *Making Mead* by Bryan Acton and Peter Duncan. It is an Amateur Winemaker (UK) publication. You might get a copy from one of the mail-order home-brew suppliers.

Generally, blended honeys are inferior, and eucalyptus blossom should be avoided as it is bitter. If you want the best mead, use the best honey. I use a general purpose wine yeast and treat it much the same as white wine. Also, I use a yeast nutrient, as honey is very poor in the vitamins and minerals needed by yeast. Melomel is made with honey and fruit juice. The spiced mead recipe given by Judy Carter in GR 70 is more correctly called metheglin. Pymment is made from honey and grape juice, while honey and apple juice makes cyser. My favourite drop is cherry wine and I currently have about 60 kg of reject cherries to ferment (thanks to an orchard about 50 km away at Young, where we were picking cherries). A further point to remember in making mead: boiling the honey is not recommended as you will destroy some of its subtle flavours. Sterilise with sodium metabisulphate unless this affects you adversely. Otherwise, boil very sparingly. Another good book on the subject is *First Steps in Winemaking* by C J J Berry.

Our life here is not the purist GR existence, but we're out of the rat-race and still surviving quite comfortably. We are planning to run an Angora goat herd which in a round about way, is how we found *Grass Roots* in the first place. Bye for now and best wishes to all.

Wayne Airey & Jenny Karas
'Hiview'
Cowra Rd
GRENFELL 2810.

Dear Grass Roots Friends,

I am looking forward to visiting your beautiful country in September. I am headed towards the NORTHERN TERRITORY and shortage of time will not allow me to investigate the nooks and crannies that hold a country together. What I request before then are your experiences of life at the moment, i.e. population of your area, industry, climate, rental, wages etc.

I am a 25 year old jack-of-all-trades but primarily a bridal gown cutter. I live in a rural town with five streets and drive 40 minutes to town each day to work. I have briefly experienced the alternative lifestyle and am still headed in that direction. Where I end up and maybe settle may depend on how pretty a picture you paint. So please write. I'd be extremely grateful.



Natasha-marie Stables
PO Box 258
THAMES NZ.

Dear Grass Roots,

We are planning on building a LOG HOUSE (not a kit one) and would appreciate hearing from people about any problems that they encountered. Any advice would be greatly appreciated. Thanking you.

Helen Lohman
Telleraga
MOREE 2400.

Dear Grass Roots Readers,

Hi there. Can anyone help me? I have heard of BURNING TREE STUMPS using a 44 gal. drum (or other sized container) on the principle of a chip heater. The burning stump is then self sustaining, therefore not needing copious amounts of fuel. What I need is the sizes/ratio of the chimney, air funnel or air intake vent. I have heard of these drums burning a green stump to a metre underground. Hoping to hear from you soon. Best wishes to all of you. Thank you for a great mag.

Mike Ehlen
'Wandong'
BARADINE 2396.

Dear David and Megg,

I want to thank you both and your helpers for making our lives just that bit better, I have made friends with several Feedback writers, and feel that my family is spread far and wide. It is wonderful to read of others who share their joys and problems. Perhaps my ideas will help someone else. I do hope so! We live on five acres in Campbelltown, and I realise that I am very fortunate. However, to live THE ALTERNATIVE LIFE, to me means doing things the old way. I don't have the TV or radio on through the day. The silence is filled with bird song, and I can watch our blue tongue family basking in the sun. The kookaburras sit in the peach trees and tell fibs. Our Siamese queen is 12 yrs old now, cross eyed and quite pally with our dog who is smaller than her. They like to watch the starlings on the lawns. Rex likes to think he can chase the birds but instead of flying away, they just land again behind him. Rex is eleven years old. We have two horses that make marvellous lawn mowers, and they take care of the back four acres.

When we retire in a few years time, we hope to travel and visit some of the south and north that we've not yet seen. With that idea in mind, we have bought an old caravan and my husband is slowly refurbishing it. We shall then make a few short trips to get used to living out of reach of conveniences. We both have bicycles and enjoy riding them, so they will be going with us. I try to make what we need and mend what I can't make. After all, we really don't need half of what we are told we need. The way I see it is that people need a kind word of praise more than money. Fresh fruit before noon, and fresh salad after noon, as much pure fruit juice as can be drunk daily — these are our rules of thumb. Thank you for your time and patience.

Sharon Wickenden
PO Box 572
CAMPBELLTOWN 2560.

Dear Friends,

After spending 32 years living in city environs, I decided to try the community lifestyle, reputedly more healthy for mind and body. I found in the last eight years of 'alternative' living that it is indeed more healthy for the body, but not so for the mind. This comes about through the HORRENDOUS STRESS of all the discrimination and harrassment on all possible fronts.

Firstly, if you happen to be sane and see clearly what is happening to the planet on which all our lives depend, you become activated to do something about it, and that is when all your troubles begin. Now, if after a few years you start to tire of being carted away by the police for simply making a stand against the continual destruction, you might just decide to go live with the trees, grow your own food and build your own house. Ah ha! Now you think all your troubles are over. Well you're wrong! They have only just begun.

Communities consist, you find, of a mixture of all sorts of people. Some care for the planet, some don't. Battles ensue, but you think you can handle that, after all there is always education. So you spend years talking to people about the need to protect and enhance the environment, it is after all the only planet we have. This becomes quite a task, as not many people fleeing the polluted cities have delved into the real facts of how bad things really are.

More than this, the councils give you an unbearably hard time and threaten your very existence whenever they can. Your daily life starts to consist of various battles: development approval, building approval, fire and weed inspections without notice, and demands for exorbitant levies for nightmarish roads. Then, if you happen to disagree with any of the multitude of conditions that may be attached to your development approval, i.e. you don't want to devastate the land by burning or poisoning, you find you have no say as they will force their hand anyway.

The place I live on was a 360 acre paradise of wildlife and tall trees. Recently after being totally intimidated by the Kyogle Shire Council, the 'developers' of this community lit the match that destroyed most of it. There is nothing much alive now as local fire brigades would not come when called to attend the fire when it got out of control. Why, you might ask wouldn't they come? Well, the former Shire President of Kyogle had told them not to bother, after all, we're all just a bunch of troublesome greenies. They want us to continue the burning and poisoning, otherwise it might show them up because that is what they do to their land.

Sophia Andrea
PO Box 136
NIMBIN 2480.



Feedback Link-Up Feedback

Dear Grass Roots Folk,

I'd like to take this opportunity to thank you for a very informative magazine. The article on 'Low Voltage Systems', in GR 69, was very timely for us as we'll soon begin building our home on our few acres. One thing we cannot relate to in your magazine is that the majority of the contributors have to design their homes and lifestyles to keep cosy and warm in winter. We're the opposite — winters here in Nth Queensland are really wonderful, whereas summer's very hot, little will grow without shelters from the sun's burning heat — our house is designed to allow maximum flow through of air and is a rather spread out design (this is where the article on LOW VOLTAGE SYSTEMS was handy, suggesting running thick cables to distribution points and finer wires off these points). All that we had read previously had stressed the importance of keeping things compact — going up a storey rather than spreading the house out.

My husband Dave and myself are living on our land in a caravan until our house is built. We were originally going to build the house of stone but, after reading articles about it, discarded the plan as the many rocks on our land were not the size and shape to make houses of. With the regulations imposed by council up here you just cannot build a house with natural materials only — so much steel is required to be inside the walls, to withstand cyclones. Hopefully, we will be ready to move into our new home before our baby is due — in April. Must sign off now.

**Doreen Spillman
PO Box 640
Hermit Park
TOWNSVILLE 4812.**

Dear Grass Roots,

I am writing to you for HELP AND INFORMATION. We are a family of 8, children ranging from 1 to 17 years. We dream of finding a few acres of land on which to be as self-supporting as possible, but we don't know how to get ourselves started. Any advice on concreting and bricklaying would be a help — I have had lots of experience in other construction work but not that. We get by now on what we grow in the garden but we feel the need to make a move to where there's more space. We don't have much money and will need all the help we can get, so any advice or information we can get would be great.

**D A Walker
12 Nambaree Dr
BRAYPARK 4501.**

Dear Friends,

Having recently migrated from the north western USA, seeing your magazine was a refreshing breeze, reassuring us that sustainable living is well supported in Australia. We look forward to learning from others within your network and perhaps helping where we can. Our focus here is a 40 acre ridge of rich red soil where we will be planting chestnut trees as orchard and nursery. We will be introducing some of the high quality Chinese and hybrid varieties not yet known in this country. We'd like to HEAR FROM NUT GROWERS, even with just a few trees, to compare qualities and cultural information, obtain seed and assist in marketing. We are open to assisting others in the areas of orchard planning and production techniques for temperate fruits and nuts — for the last 10 years we operated a mail-order tree nursery and mixed orchard specialising in apples (200+ varieties), pears, small fruits and nuts. We can also assist in nursery production techniques, seed acquisition of North American natives and tricks and tools of organic soil management. We need to learn about heavier clay soils, Australian native seed sources and nursery tree sources for temperate Victoria.

**Larry & Barbara Geno
PO Box 220
DAYLESFORD 3460.**

Dear GR Folk,

I read in GR 54 an article by Jurgen Nicklisch about TASMANIA'S NORTHEAST, around St Helens. People tell me it is bypassed now by the new highway. Jurgen gave his address only as Goulds Country, Tasmania. I would like to enquire from him if things are still as good, but wonder if this address is enough. Are there others in the area now who I could write to, or who would write to me? Or Jurgen if he is still around and reads this. Love to hear from anyone in NE Tas.

**Lynda
38 Turitable Rd
MT MACEDON 3141.**

Some of Jurgen's recent travels were featured in 'A Home on Wheels', GR 69, p. 29, so he may be a little hard to contact now!

Dear Grass Roots,

Alain and I are in our late 40's and we live on our 12 metre schooner, 'Fraternitas', along with our huge slobbery Turkish dog (Kapi by name) amongst the Youruk tribespeople at Kapi Dagi, in Turkey. We chose this simple way of life for all the obvious reasons (Alain built the boat in Le Havre, mainly out of everybody else's leftovers, not that long ago, in 1979). Though we live on a shoestring budget (minus the shoe sometimes!) we are very satisfied with our life, but I do need tips and guidance from time to time. That's why my copy of GR 66 (which was given to me by a passing yacht, under charter with English speaking people on board) is like a breath of heaven. It's refreshed and unscrambled my brain, allowed me a glimpse of your life and given us some lovely ideas. As I sit here on deck, listening to the call of the mosque while Alain does maintenance work, I imagine you all at your tasks. What a neat bunch of people you are.

If anyone could help me with my requests I would be delighted, but perhaps I should first explain a little of our lifestyle.

We don't have a refrigerator or oven, we cook on one gas ring, but we do have a pressure cooker, so if anyone has any RECIPES FOR BISCUITS that I can make on the gas ring I would be thrilled. Unfortunately we are unable to purchase rolled oats or brown sugar, the basis of many biscuit recipes.

We don't buy meat, instead we shoot and preserve wild goat and mountain pig, as well as set the net each night for fish. Occasionally, when we go to the bazaar at Fethiye, we buy a chicken. We sail there every 4-5 weeks, using only the wind and anchoring well away from the quay (recently we met some Canadians on their 9 metre boat who had sailed to the South Pacific and back without a motor — what a wealth of stories they had to tell). We keep expenses low by waiting for the wind, knowing that when it drops it always comes back and we are not in any hurry, though sometimes in stormy weather we are forced to motor part of the journey.

Bread is made by Alain in the frying pan, adding garlic and curry for flavour. Alcohol is never bought but occasionally somebody gives us a bottle of wine which we save for a celebration and often share with a passing Youruk fisherman. We take sage from the mountains for tea and dry all our lemon and orange peel, which we add to our black tea, it makes a refreshing drink indeed.

During the spring, mushrooms provide a tasty meal, though we carefully identify them now after a nasty experience last year, we mistook one of the species we usually gather. We make lovely salads from other plants that we gather in the spring. Eggs we buy from the tribespeople or swap for something they need. A Turkish friend brought her cow by boat to our little peninsula last year, so now we have delightful yoghurt mixed with honey fresh from the hives.

The Youruk tribespeople where we live are so uncomplicated: there are no roads; their one roomed mud and roek homes are only accessible by sea; they are without electricity or schools; folk go to bed at dusk and arise at daylight. The children tend the goats by day, adults weave the goat hair and hand make beautiful lace as well as grafting new shoots onto the olive trees, using only cow dung and soil. Vegetables in winter are grown in a roughly constructed plastic house, burning olive wood in an old earth-clay stove for warmth. I could write for hours of my admiration for these sensitive weatherbeaten people. This brings me to the end of my epistle. I realise postage is so expensive these days but if anyone could help me with the biscuit recipes and also a recipe for WORCESTERSHIRE SAUCE (remember, no brown sugar available) and how to PRESERVE ROSE and other flower PETALS (dried — do you call it potpourri?) I would be grateful.

What can we offer in return? Only stories about our years in Turkey or if any GRs are coming this way you are welcome to spend a day or 3 with us (on condition that you bring a *Grass Roots* magazine). We are rough and ready but trusty. I wish you all a rainbow.

**Louraine Tomaz & Alain Capon
C/- Gobun Tahir Restoran
Gocek
MUGLA TURKIYE.**

Dear Grass Roots,

Does anyone know of any SIMILAR PUBLICATIONS to *Grass Roots* available in the UK and of any wholistic communities? Also, do they have any acre share community systems over there? We look forward to hearing from anyone. Good health and happiness to you all.

**Angela Dyson
PO Box 321
YARRA GLEN 3775.**

Feedback Link-Up Feedback

Hi, Grassrooters,

I have been an avid reader of this mag for many years and now wish to contribute something in return, in response to queries in GR 69.

To Bill Mc Creath of Toowoomba: there is a family in Gympie who supply, thankfully, NON-HYBRID SEEDS of the rockmelon variety, they have Hales Best, Honeydew, Indian Cream Cobra Melon and Planters Jumbo. Their address is The Finch Family, MS 316, Gympie 4570. Ask for the non-hybrid seeds pamphlet. Their phone number is 071-865-230. They stock vegie seeds, herb seeds, bulbs and roots and interesting plants by special request, — definitely a valuable booklet.

To Sue Wain of Caboolture: TO DETER DOGS I have planted wormwood and it is at the top of my garden at 3 m (10 ft) intervals. Unfortunately the dogs attack the bottom of the garden! It works and it's very pretty.

To Richard Kandel of Seaford: my BANTAMS defy all efforts to keep them within boundaries. The cats don't bother them because the duck, Gretchen, has them all bluffed! Nevertheless, my bantams know where home is and usually stay close. Regular feeding trains them that the grass is greener here.

Are there any young people living the GR life in or near AGNES WATERS/TOWN OF 1770? My man, son and I should be moving to our land there next year. I would love to hear from any of you. Best of luck to you all. May all your dreams come true.

**Gail Jacobsen
1 Myles St
LAWNTON 4501.**

Dear Grass Roots Readers,

We wrote a letter to *Grass Roots* in the early part of 1987 requesting information from anyone who had immigrated to Australia from America. We received numerous responses and after 9 months of paperwork with the Australian Consulate in Chicago, we are now living in Ballarat, Victoria! We would like to thank all of those who shared their experiences, both good and bad and encouraged us to persevere with the paperwork.

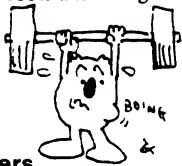
Presently we're leasing in the town of Ballarat but are intensively looking for a place of our own in the bush. We came from a rural area of southern Illinois and would like to make contact with any GR oriented people/families living in or around the area of Ballarat. We hope to be back in the country within the next few months.

**Hugh Morris & Louise Martin
420 Finch St
BALLARAT 3350.**

Dear GR Readers,

I've just finished GR 68 — another great issue. One of the articles entitled 'Sandbag Building' was by PETER THORPE of Winnellie, NT — really interesting stuff.

Well Peter I rang the number given and found you have moved on. If you are still in the Darwin area how about giving me a call? I would love to hear from any *Grass Roots* readers in the area. The sandbag idea really got my interest up. Also if anyone building in stone in the rural area would like to share their experience I would love to hear from them. Here's to getting back to grass roots and fixing this world of ours. Love and peace to all.



**Neil Denney
8 Melville St
Gardens Hill
DARWIN 0800.
089-411-568.**

Dear Grass Roots Readers,

Can anyone tell me where or how I can find out the steps in doing my own CONVEYANCING in SA (the paperwork landbrokers do when you buy/sell a property)? Any help appreciated.

**Penny Miller
62 Darebin St
MILE END 5031.**

Dear Megg and Grass Roots Readers,

I've got about 10 coffee trees, but BULBING AND SHELLING the beans is still a very slow process and problem. Would anybody know a gadget or machine which would do the job the easy way, or a manufacturer which makes these smaller machines?

Any ideas would be appreciated.

**H Barb
6 Ross St
YEPPON 4703.**

Dear Megg & David,

As you can see from my address I've moved — no longer at Wardell. We moved down here from Brisbane to escape the rat race but found Wardell a little too isolated, especially since my job is in LISMORE, so have moved to the outskirts of Lismore. Still, we have moved from a city of over 1 million to one of 50,000 — from one that takes an hour and a half to cross by car to one that would take about that long on foot, still quite a change, back to a more human scale of living.

Anyway, all the best with your magazine in the new year, by the way, as Reference Librarian with Richmond-Tweed Regional Library I find it a great help in my work too in helping me answer many of our users' enquiries, as well as simply enjoying reading it.

**Stephen Legge
2/42 Figtree Dr
GOONELLABA 2480.**

Dear Megg,

I would like to pass on a very big thank you to your magazine, let me explain. In the April edition of *Grass Roots* I placed an advertisement for helper/companion; the replies were many and were reduced to a short list of 3, eventually for various reasons and no help from me, it was reduced to one. We have been corresponding ever since and last week we met, both of us are slightly bemused. We became engaged within 3 days and are to marry next year, every circumstance since the first letters has led us along a certain path and we are both extremely happy. We thought it would be nice for you to hear the happy outcome of a situation created for us by your magazine; it may also be encouraging to others. Once again 'thank you from the bottom of our hearts'.

**Pam & Fred
PO Box 652
YEPPON 4703.**

Dear GR Readers,

I sincerely hope that Donna McGregor of Islington, NSW reads the article in the August *Grass Roots* on FOOD ADDITIVES. An article in the *New York Post*, in April 1985, dealt with the effects of the yellow and orange colourings on all respiratory sufferers. All foodstuffs with these colourings added were labelled as a health hazard and the consumer ate them at their own risk. The manufacturer would accept no responsibility for any harm that may be suffered by the consumer. All artificial colourings and flavourings affect my tonsils, even though I have no asthma. Since the increase in aluminium production in the Hunter Valley, there has been an enormous increase of respiratory complaints. There was a report in a local newspaper about the effects of fluoride in the manufacture and processing of aluminium. Some of the operators were severely affected by respiratory complaints, asthma being the worst.

To Kim Hynes of North Warrandyte. Have no fears about IMMUNISATION. We reared five children. The eldest, who is now 54, was the only one not immunised and the only one to be afflicted with diphtheria. The other four had no side effects at all and no infectious diseases. The youngest son is now 39 years old.

About HOME BIRTHS. My two grandmothers had 26 children between them, one 12 and the other 14, all at home and no doctors. All of these children except 2 grew to old age including their mothers, one 91 years and the other 84 years. I think the greatest problem with childbirth is what the mother eats during the pregnancy, also the lack of exercise. I have been associated with the land all of my life, and have observed that the active women had very few problems at child birth.

All the best to GRs of the present and those of the future.

**Richard K Alcorn J P
31 Hospital Rd
WESTON 2326.**

Hi,

My name is Steve, I'm 23 years of age and easy going. In 1990 a friend and I will be making a 6 month JOURNEY BY BIKE through all states of Oz and we are interested in making friendship by mail between now and then and calling on friends on our way around. We would like to investigate different mud-brick constructions and anyone who would be building or has completed one, then we would love to hear from you. Also we would love to hear of all of those out of the way tourist places that aren't on the map and would be interested to know of the seasonal work available in all States, so all help dearly appreciated and all letters will be warmly replied to.

Here's to living . . .

**Steve R Smith
Locked Mail Bag No 2
NORTH PARRAMATTA 2151.**

Feedback Link-Up Feedback

Dear GR,

FROGS IN THE LOO! What can we do? Having stepped up from a 'mattock in the bush' to a proper flush toilet and septic tank, we've found the frogs like the loo even more than we do. They live in the bowl, the cistern, the pipe, the tank, everywhere! And the thought of their little damp feet attaching to my buttock at a crucial moment is enough to send me back into the bush! The toilet is outside in a concrete shower block — very open, half-height walls. Help! Any suggestions for coaxing them out of our ablution block will be appreciated.

**Cathy & Peter
PO Box 3265
DARWIN 0801.**

Dear Readers,

There are times when we must look reality in the face and respond in an intelligent and positive manner. I know that the problem of DOMESTIC AND FERAL CATS is huge. The domestic cat is my main target here because although so lovable it spends the hours in which we sleep eradicating anything that moves in the environment. They almost 'sterilise' their territory of lizards, birds etc. and then when the sun comes up they come in for love.

One of your contributors mentioned the use of FACTORY FARMED CHICKEN MANURE in conjunction with organic farming, but it is a fact that the antibiotics used on the chickens are in their manure and the vegetables which we grow from it, so beware.

Kind regards to all.

**Vince Hawley
1/3 Bambra Crt
DARWIN 0800.**

Dear Grass Roots,

I've never written to you people before but I am an avid reader of your magazine (when I can get it). As I'm dreaming of turning a slice of dear mother earth into a self supporting paradise, your magazine has been very informative and I now wish to ask for a little information on BUILDING A PYRAMID, whether it be six inches or six feet high. As I understand it must be made out of timber (dowelling rod?) not metal. How is it joined together, especially at the apex? If anyone wishes to write I would be most grateful.

**Jim Smith
7 Baringa Ave
WOODRIDGE 4114.**

Dear Grass Roots,

I've read and enjoyed *Grass Roots* for many years, and fall into the category of those who you might call 'backyard' farmers. I am writing in response to COLIN BROWNE'S LETTER (GR68). I too have ME and one of the hardest things about this, or any other debilitating illness, is learning to take each day as it comes, especially if you're used to an active life as many ME sufferers are.

I have found a lot of support, information, and suggestions for therapies from fellow members of the ME Society — address: PO Box 7, Moonee Ponds 3039. I should point out that there is no present 'cure' for ME, but there are many ways of helping yourself get well. It doesn't cost much to join the ME Society, and members are supplied with a list of people they can contact for support.

There are now regional support groups in Bendigo, Geelong, Wodonga, Echuca, and the Wimmera (in Victoria). Interstate readers can write to one of the following: ME Association NSW, PO Box 645, Mona Vale 2103; ME Association SA, 9 Coronado Crt, The Sands, West Lakes Shore 5020; ME Support Group of Queensland, The Secretary, Pinewood St, Coomera 4210.

It would be interesting to hear through the pages of *Grass Roots* from other readers who may be devoted conservationists and would-be country lovers of a self-sufficient lifestyle, but who are disabled in some way. Perhaps we could share ways of living well and at peace with ourselves and the land even though we can't be out there digging and building.

**Libby Bolitho
UPWEY 3158.**

Dear Grass Roots,

I would like to thank Richard Savage (GR 67) for the information on SAFE BEEKEEPING. I'm at Unit 8, doing well, have 3 beehives, spent a weekend in Sydney at the Poultry Research and at Mudgee, people were very friendly and helpful. Thank you all for *Grass Roots*.

**Hellen Van Dyke
RMB 5575
BROADFORD 3658.**

Dear Grass Roots Readers,

One of my interests is wholefood cooking brought about by my belief that good health frequently begins with what you eat. I have just read a very interesting article in ECOS (the autumn 1987 issue, No. 51) — by CSIRO. The basic theme involved is that FIBRE, which is known to be great for bowels, is now known to be digested by resident bacteria and absorbed into the bloodstream especially by internal organs. Hitherto, all articles I have read state that fibre is almost totally undigested. I am quite impressed with Pritikin's ideas however I do use avocados, whole eggs and nuts. Does anyone have any good vegetarian meals that do not contain cheese?

Another interest is gardening though I am running out of room on our ¼ acre village block. I gathered bits and pieces here and there and allowed things that grew themselves to develop — like tomatoes. However an important point I want to make that I learnt the hard way is, be careful where you get PLANTS, seedlings etc. There are a lot of despicable DISEASES AND PESTS that are soil or seed borne and once established are hard to get rid of. I wrote to *Grass Roots* once asking for hints on cures of diseases and I received a few ideas from people and encouragement. I thanked all who wrote except for one person whose letter I unfortunately mislaid. I have gardened many years now but this is the first place I have encountered so many diseases. I realised I've never been so diligent before at gathering bits and pieces. This is the first place we've owned and I was anxious to get my garden established. Especially a problem is target spot or blight on tomatoes. It is seed borne so obviously some of those self sown tomatoes came from infected fruit. So prevention is better than cure. This applies to a lot of gardening problems. I would strongly recommend to anyone anticipating gardening organically to research this rather than finding out the hard way.

**Dianne Barker
C/- Mailbag
TUCABIA 2462.**

See 'While the Billy Boils' this issue for a vegetarian recipe with no cheese.

Dear GR,

I have been given 150 fire-bricks, and would like to build an outside PEASANT OVEN, the kind that you build a fire in and rake the ashes out before you cook. I have exhausted bookshops and the library, who suggested that I write to you. Anyone who could help or point me in the right direction, I would be most grateful to hear from you.

**Valerie McIlwain
23 Elm St
BAYSWATER 3153.**



Dear People,

Could anyone give me contacts of any ESSENE or similar COMMUNITIES? Also, I would like to hear from Brisbane fruitarians.

**H Y Goater
40 Whitworth Rd
CANNON HILL 4170.**

Dear Readers,

Can anyone please help? A few years ago I had a YOGHURT/KEFIR CULTURE that resembled white sponge. Onto this sponge one poured the milk and left it at room temperature for a number of days depending on temperature. Well not only does it make beautiful yoghurt but it grows, so one has to continue to make yoghurt...! I threw it out, which I regret now. Can anyone tell me where I can obtain some more?

Also does anyone have a recipe for FETA CHEESE with goats' milk? Any other goat cheese recipes would also be appreciated. Look forward to hearing from you — thanks.

**'Enquirer'
C/- PO Box 152
BRAIDWOOD 2622.**

Dear Megg and Kath,

Thanks for the great magazine! I'm wondering if any readers have recipes for making CORDIALS AND JUICES from BERRIES. I always have an over abundance of blackcurrants and raspberries and it would be a great way to use them.

We are currently waiting on council approval on the plans for our octagonal mudbrick house to be built on our 20 acre bush block near Tylden. When we get work underway I'm planning on growing a larger more diverse berry patch than I have on our allotment here.

**Jenny, Peter, Melanie & Kylie Evans
113 Barry St
ROMSEY 3434.**

Feedback Link-Up Feedback

Dear GR Readers,

I am shortly moving to the South Coast, NSW and would like to establish a CRAFT MARKET in the Nowra area on a regular basis (say, fortnightly). I am a potter myself and would like to hear from people skilled to professional standard in any of the following: painting, (oils, water colours or miniature), copper enamelling, jewellery, wrought iron, woodworking, spinning, weaving, knitting, crochet, embroidery, tapestry, soft toys, dried flower art, handprinted or painted cards, or any handcrafted art. This idea may be of interest to people in retirement, made redundant, handicapped in some way or to anyone looking for an outlet for their craft. Please drop me a line. All letters will be answered. With best wishes.

Marcia Hagan
C/- PO
NOWRA 2541.

Dear GR Readers,

I'm a new reader and think *Grass Roots* an interesting publication, so decided to write to ask where I can buy fresh vegetable SEEDS as we bought a dozen packets and although paid over \$1 for some we have had very few plants so far.

Also is it true that where there are those little BLACK ANTS there are no white ants? I was told the black ants (very small ones), eat white ants. We have noticed tiny black specks of what looks like dirt on top of cupboards, it either falls from the ceiling (which is high, and has exposed beams) but such fine specks would surely be dispersed as they fell from such a height, or are they droppings from these tiny ants, which do show up in the kitchen at times, but we can't see their trails to any place outside?

D Dee
C/- PO
CANUNGRA 4275.

Dear Grass Roots,

Have seen a few queries lately in Feedback about ITCHY DOGS. I have a recipe for a very simple and cheap cure which does a wonderful job on mange, flea/ant bites, non-specific dermatitis, hot spots, hair falling out, itchy skin and infected wounds. This amazing cure is nothing more than a mixture of yellow sulphur powder (available from your chemist) and a vegetable oil (I use coconut but other oil will do). The mixture will not harm your lovable canine should he lick it (maybe a slightly laxative effect). Mix the oil and powder to a paste and dab on the infected area.

My husband and I have two primary aged children and have just discovered *Grass Roots* magazine. Our dream is to move to a few acres in NSW or Vic. and become as self-sufficient as possible however we admit we have a lot to learn and books seem to assume a basic knowledge. I hope someone will be patient enough to answer a couple of questions. First if you have a rooster running with your hens can you eat the eggs of the non-broody hens? Second, why don't mudbricks melt? If any reader was as green as we obviously are and has at least muddled through I would really like to hear from you and receive a little hope. All letters will be answered.

Sally Roddum
PO Box 40959
CASUARINA 0811.

Dear Megg and GR Readers,

I have had a hard day battling with the pressures of the civilised (?) world and it was great to come home to the little farmlet. However, as it takes quite a while for me to unwind, I got out a few back issues of *Grass Roots* and began reading. As I became more and more relaxed, I suddenly realised that, through the magazine, the hands that hold all GR people together are extremely great.

Although I know very few of the readers through the magazine, it seems as though we are one great big family. Other people's problems are my problems, other people's joy is my joy, other people's hopes are my hopes . . . I guess others will know what I mean! For years I did not know where my place in the world was, but through the magazine I have found contentment and a great deal of satisfaction in knowing that I am a special breed of the human race as a *Grass Roots* person.

However, rather than drag this letter on, I will just say thank you for doing something worthwhile and bringing all of us *Grass Roots* people together. I would also like to say hello to the people who have been writing to me via your magazine and a very special hello to Kate — a very special friend to me. Thank you once again and keep up the great work. Love and peace to you all.

Marshall de Leon
PO Box 81044
Whenuapai
AUCKLAND NZ.

Dear Megg and Kath,

I am writing in response to the numerous requests for natural remedies for PSORIASIS which I have read in your magazine. I am a naturopathic student, in my second year of a four year full-time Naturopathic Diploma course at the SA College of Botanic Medicine and Natural Therapies. I have compiled a selection of natural treatments with which I and other therapists have had success in treating psoriasis.

Herbally: sarsaparilla tincture — take 2 ml (¼ tsp) of tincture in 2 ml (¼ tsp) of water 3 times a day; an infusion made from equal quantities of burdock, cleavers and yellow dock — 1 tsp of the herbs simmered in 1 cup of water for 15 minutes, and left to infuse for a further 15 minutes. Strain this and sip — add a little honey if desired. This should be drunk 4 times a day. Remember to use a glass or enamelled saucepan when making herbal infusions — metal can taint them.

Bathing: this bath treatment can be used daily until improvement then after that only as considered necessary. Make an infusion from 1 cup of chamomile flowers and one cup of oats boiled in 1 lt (1½ pt) of water for 20 minutes. If the herbs are placed in a muslin bag before boiling it is a much easier process, and the herb bag can then be used as a gentle, non-irritating skin scrub in place of soap. Add the strained infusion to a warm (not hot!) bath along with 1 cup of sea salt and 1 cup of apple cider vinegar. If using soap ensure it is gentle, good quality aloe vera soap. After bathing apply aloe vera gel to all affected skin areas. Swimming in sea water as often as possible is also very helpful.

Homoeopathically: two remedies which may be beneficial are Arsenicum Album 6c potency — for scaly eruptions which burn and itch; Sulphur 6c potency — much itching, worse from heat, and is accompanied by irresistible desire to scratch.

Emotionally: Louise Hay states in her book *Heal Your Body — Metaphysical Causes for Physical Illness* that 'psoriasis results from fear of being hurt, deadening the senses and the self, refusing to accept responsibility for our own feelings'. The new thought pattern to help overcome this is: 'I am alive to the joys of living. I deserve and accept the very best in life. I love and approve of myself. This new thought pattern can be said to yourself every day 20 times for as long as is felt necessary.

Supplements: vitamin C (calcium ascorbate), 1000 mg per day; calcium and magnesium, 500 mg per day; lecithin or cold-pressed oil, 1 tbs per day; vitamin E, 500 i.u. per day; vitamin A, up to 10,000 i.u. per day for 1 month, cease for 1 week, then repeat for 1 month.

Juices: vegetable juices such as carrot, cucumber, celery and beetroot — these should be freshly juiced daily as they do not keep.

It should be remembered that every person is an individual and therefore needs to be treated individually. All of the above suggestions will prove very helpful to many sufferers of psoriasis, but I would still recommend that they seek individualised treatment from a professional therapist. I hope that this information is helpful to readers.

Moir Watson
19 Bagot Ave
MILE END 5031.

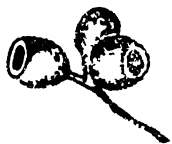
Dear Grass Roots Folk,

Hiya, my name's Jo and I'm a twenty three year old Kiwi from Rotorua who's 'gone bush' in Nth Queensland. I've been living in the rainforest for a few years now, off and on, and I reckon it's magic. I live with a family in their open style rock house overlooking a beautiful wide deep river, but I have started to build my own shack up the riverbank a bit and am using stone and bamboo, both freely and easily available. Does anyone have any hints for building with BAMBOO or maybe someone can recommend a good book? I plan to use it for supporting beams, cupboards, my bed etc . . . Any advice would be much appreciated. We all have horses here and do a bit of TREKKING in the surrounding mountains. I plan to do a long trek in the future and will make my own packhorse gear. Does anyone have a good cheap design to outrig a packhorse? And is there anyone reading this who has done a long horse trek and would like to tell me about it? Any information I would be most thankful for.

Also, if Mark Kope reads this, we made contact through *Grass Roots* (Sheryl Thomas), but unfortunately we were away and missed you in Cairns. We would like to get in touch again at below address.

Life is good up here as I tend the vegie patch and water the herbs, surrounded by my dogs, the chooks and duck. Then when the sun goes down I relax in front of the fire and pick up my favourite mag, *Grass Roots*.

Jo Hill
PO Box 527
GORDONVALE 4865.



gumnut gossip



Megg Miller.

Our office, like most others, is a noisy place. The sounds of both the typesetter and photocopier provide a constant background hum, the air conditioners belch on and off regularly, phones ring and loud discussion, expletives or frequent gusts of laughter burst from offices to punctuate the serious atmosphere of publishing. These last few days, however, have been very quiet — the machinery has continued reverberating nicely, the phone has rung loudly and regularly, it's just the inhabitants that have been more subdued than usual. *Holiday lag* would best describe the condition — a state where people go through the day bleary eyed and with mechanical movements. I'm sure you've all suffered from it at one time or other. Ten days over the festive season of sleeping late and mooching around at home erased all our regular patterns of early rising and made the first few days back hellish. Julie had the right idea — she set the alarm for dawn rising a day early to make getting up on time easier. Fortunately our internal clocks have now readjusted to 'normality' again but the experience has enabled us to feel empathy for shiftworkers whose hours are changed regularly and for teachers and others who have long breaks from their usual routine and then must suddenly face the daily discipline again. Still, time off from the normal grind does leave a person more refreshed and more able to meet the challenges of daily life.

David and I look forward to this break, we can rarely get away as a family because of livestock commitments, so a few days at home with the phone quiet and no one around is pure bliss. But I can't sit idle for long, after a couple of days I'm raring to get going again. I always have a few jobs to do that I haven't had time to attend to during the year and with the office empty it's a pleasure to be able to spread out and make a mess without being disruptive to anyone. My main job was to update our extensive newsletter/magazine collection and when I waded through the recent backlog I had the time to shake the dust off a box or two of alternative living magazines that were printed at the beginning of this decade. As well as being a trip down memory lane it was also very sobering to read *Ziriu* and *Maggie's Farm* and remember those promising shaky steps that laid the foundations for today's sustainable lifestyles. *Ziriu* was a monthly newspaper started in the late seventies that covered all aspects of natural living, and in the March 1980 issue it said:

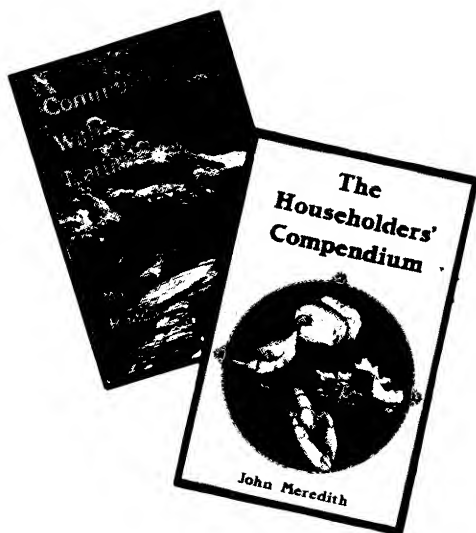
'There's a revolution that's changing the face of Australia — it's a quiet revolution as hundreds of thousands of people move to regain control of their lifestyles . . . And it's not just confined to the often rebellious young. People of all ages and from all walks of life are taking part. The revolution is in education, health, in lifestyles generally but it's extending to man's search for his true identity and for his religious and spiritual roots.' Headlines in other issues from that and the following year spoke of the spectre of living under the threat of nuclear warfare, but more optimistically stated that mudbrick was a lasting building alternative, that wind power was under investigation and that a discovery by Japanese scientists could lead to widespread use of solar power. So much was happening. Natural foods were relatively new and exciting, homebirth a safe possibility, spirituality and personal development were buzzing and groups were coming together everywhere to take steps to make these new alternatives work. Today seems a jaded world by comparison. We now take for granted the availability of so much that was in its infancy then — natural health modalities, building and energy options, whole foods, yoga and meditation, small farm information, and we seem tired of the old issues like woodchipping, conservation,

uranium mining. But what struck me most about the development and changes that have occurred is the emphasis away from the spiritual and onto the more material, the more prosaic aspects of living. Culture is constantly changing, refining, redefining and it is right that we've all grown through the exciting early years of what was then very much an alternative culture and developed to the point where what was considered way out and idiosyncratic has been absorbed and taken up by the larger community. It's pleasing that these so called 'weird' ideas and practices are now available for the benefit of all people but it's disappointing that during this evolution the real loss has been a spiritual one. The promise shining out of those early magazines for widespread spiritual fulfilment has never been realised and sadly we are probably all less for it.

Fascinating as it is to ponder on the past we have a number of points concerning the present to discuss. I'd like to thank the many readers who responded to my request in the October issue for contributions on urban self-sufficiency. We have received a wonderful assortment of articles and it is inspiring to read of the different approaches and solutions to living happily and healthily within a set of inflexible limitations. We are happy to present two of these stories this issue. Secondly, we would like the present address of several readers: Jo Carpenter, please send your address so we can publish your penpal request; Kate, who advertised in the October Contacts, and Mrs Fraser, formerly of Brierfield NSW, we have letters here for you. Finally, you may have noticed that the Grassified deadline for next issue has been brought forward. Because Easter falls early we must get the paste-up to the printers earlier to ensure we get the mag out on time. In addition, we like the subscribers to receive their copy prior to the shops release and to meet this commitment we must go to the printers earlier. We hope the deadline dates are not too inconvenient, especially for those readers in out of the way places.

Before — and after — Christmas we received some lovely cards and letters from many of you, sending us seasonal greetings. Our noses were really close to the grindstone at the time and so your thoughts were much appreciated. Amongst this mail was a letter whose story I want to share with you. It came from a regular reader and contributor to Feedback, a young woman I taught at secondary school in the early seventies. She was a wild and wilful girl, lashing out at a world that had failed her miserably. Some years later I saw her, with new baby, though she was little more than a child herself. When I saw her again, several years onward, she had fallen under the spell of *Grass Roots*. I don't profess to know her whole story but I do know life has contained much pain and disappointment. We've kept in touch these last years, and I've marvelled at her courage in building a meaningful life for her child and herself. Much of her direction and strength came through her interaction with GR people and philosophies. You won't be surprised to know I had a lumpy throat when I read her Christmas letter telling me of the lovely friend she has met and married. I know GR didn't change Deirdre's life but it did give her focus and meaning and so in a way her happiness is our happiness. The values GR expounds and the practical suggestions for realising them come from your input. On the newsstand it may look like just another magazine but inside its pages are rich with people and stories one can relate to — lifestyles to work towards and people that are real, with imperfections as well as strengths. Here's to you Deirdre and the other readers who with pluck and determination are creating their own life rather than letting life create them. Cheers.

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144pp \$9.50 post paid

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Cheryl Paul

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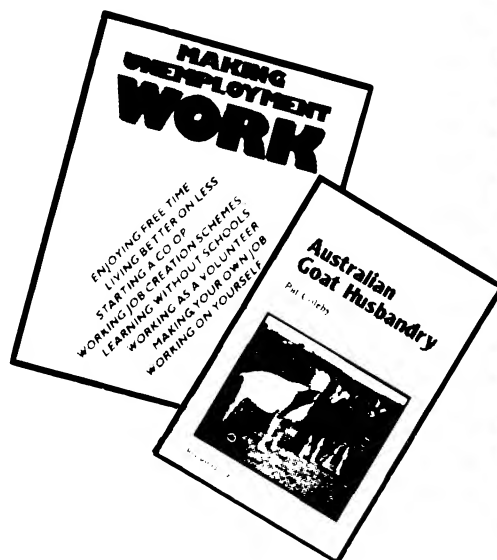
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